## EMERGENCY DEPARTMENT DISCHARGE PATIENT SUMMARY

AGGREGATE REPORT

October 1, 2005 Through December 31, 2005

San Diego County May 2006

#### Introduction

The Community Health Improvement Partner's Violence and Injury Prevention Work Team, in collaboration with the County of San Diego's Emergency Medical Services (EMS) and the Hospital Association of San Diego and Imperial Counties (HASD&IC) conceptualized and coordinated the implementation of the Emergency Department Data Surveillance project.

The Emergency Department Discharge Patient Summary is a report describing all patients who are treated and discharged from the participating emergency departments in San Diego County. Emergency department (ED) discharge data, however, does not represent all patients who go to the emergency department. Those patients who were admitted to the hospital from the ED are not included in this database. The information contained in this database is collected from billing data, so if a patient presents to the ED and is admitted to that same hospital, all information is transferred to the inpatient record and the patient becomes part of the hospital discharge database. Typically, between 12 percent and 20 percent of all patients who present to the ED are admitted to the hospital.

Emergency department data that is reported to Emergency Medical Services (EMS) does not contain unique identifiers, such as social security number. Each record represents a visit to the ED; multiple visits for the same person cannot be identified and accounted for. Therefore, this report represents the number of *encounters* (visits), not the number of *people* who use the ED. For the purposes of this report, the term *patient* will be used to refer to all discharges from the ED.

The following data elements are reported to the hospital association: Facility ID Number, Patient ZIP code, Date of Birth, Sex, Race, Ethnicity, Service Date, Principal Diagnosis, Other Diagnoses, Principal Procedure (CPT-4), Other Procedures (CPT-4), Principal E-Code, Other E-Codes, Disposition of Patient and Expected Source of Payment.

Sixteen of eighteen civilian hospitals reported emergency department data for this report, and less than three percent of ED discharge data was missing for this quarter. Therefore, annual rates per 100,000 in the population were calculated.

Rates are calculated by dividing the number of ED discharges by the total population, and multiplying by a constant. For example, to calculate the annual rate of ED discharges among 25 to 44 year olds in San Diego County, the following equation would be used:

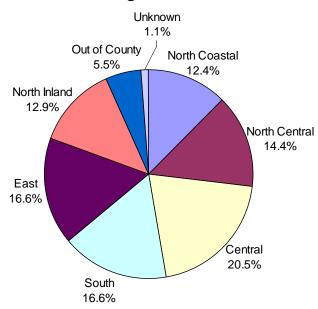
<u>Total ED Discharge Patients Aged 25 to 44 years, July – September 2005</u> X 100,000 = Rate per 100,000 (2005 San Diego County Population Ages 25 to 44 years) / 4

Since rates are being calculated on quarterly data, the 2005 San Diego County population must be divided by four in order to create annual rates that can be compared over time. When appropriate, annual rates are presented in this report for all patients.

#### **Patient Residence**

The Health and Human Services Regions that ED discharge patients live in were identified by their home zip codes. The 148,526 patients discharged from the sixteen emergency departments (EDs) represented in this report were distributed amongst the six Regions as displayed below. The highest percentage of patients lived in the Central Region (21%), and the lowest percentage of patients lived in the North Coastal Region (12%). See Appendix A for a map of the regional and subregional area boundaries.

#### **Patient Region of Residence**



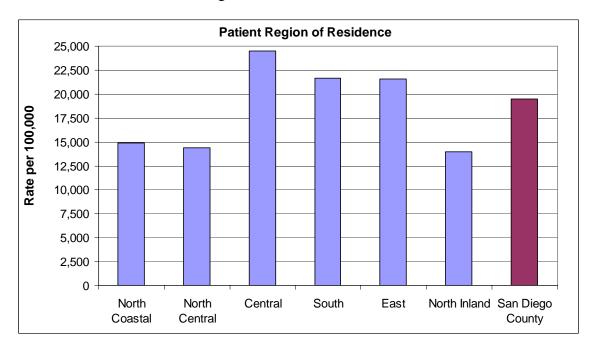
Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.

**Patient Region of Residence** 

	,	
	Frequency	Percent
North Coastal	18,475	12.4
North Central	21,457	14.4
Central	30,403	20.5
South	24,643	16.6
East	24,625	16.6
North Inland	19,193	12.9
Out of County	8,100	5.5
Unknown	1,630	1.1
San Diego County	148,526	100.0

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.

Overall, residents of San Diego County were discharged from the emergency department at an annual rate of 19,471 per 100,000 in the population, or nearly 20 discharges for every 100 residents. The rate of ED discharge varied significantly by region. Residents of the Central Region (24,463 per 100,000) had the highest discharge rates in the County. The North Central (14,413 per 100,000) and North Coastal (14,855 per 100,000) Regions had the lowest rate of ED discharges.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*San Diego County total includes 9,730 patients with out of county or unknown zip codes.

Patient Region of Residence, Rates per 100,000

	Frequency	Rate
North Coastal	18,475	14,855.4
North Central	21,457	14,413.1
Central	30,403	24,462.7
South	24,643	21,661.4
East	24,625	21,593.3
North Inland	19,193	13,959.1
Out of County	8,100	*
Unknown	1,630	*
San Diego County	148,526	19,470.6

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges.

The distribution of ED patients by community, or subregional area (SRA), is presented below. See Appendix A for a map displaying San Diego County regional and subregional area boundaries.

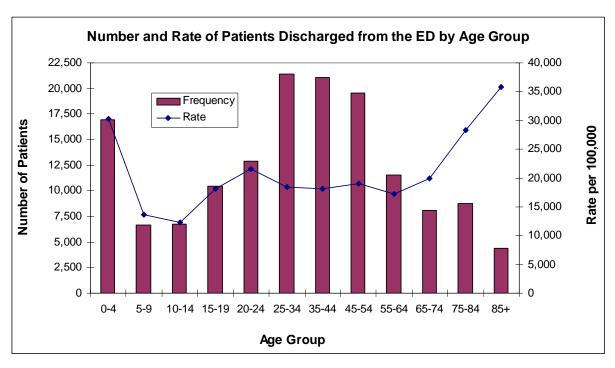
#### Patient Residence by SRA, Rates per 100,000

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	Frequency	Rate
Central San Diego	11,176	26,731.6
Peninsula	1,782	11,546.5
Coronado	198	2,936.3
National City	3,953	24,828.8
Southeast San Diego	10,035	25,057.7
Mid-City	9,192	21,665.2
Kearny Mesa	7,621	20,097.6
Coastal	2,856	14,589.5
University	1,683	
Del Mar-Mira Mesa	3,815	10,054.6
North San Diego	4,101	16,492.6
Poway	2,879	12,916.4
Miramar	30	1,855.0
Elliott-Navajo	3,172	14,059.7
Sweetwater	2,838	10,204.8
Chula Vista	9,892	34,749.3
South Bay	7,338	21,072.1
Jamul	1,196	32,744.7
Spring Valley	3,440	16,955.2
Lemon Grove	1,702	22,783.7
La Mesa	3,568	
El Cajon	5,300	
Santee	2,617	19,810.7
Lakeside	2,244	
Harbison Crest	3,783	24,081.7
Alpine	687	18,318.8
Ramona	1,455	16,563.7
San Dieguito	3,038	13,106.3
Carlsbad	2,902	10,753.5
Oceanside	7,347	17,764.5
Pendleton	16	208.2
Escondido	7,223	18,445.7
San Marcos	2,935	13,922.5
Vista	4,782	19,008.2
Valley Center	597	11,063.8
Pauma	149	8,728.8
Fallbrook	515	4,304.6
Palomar-Julian	88	6,196.1
Laguna-Pine Valley	102	7,793.7
Mountain Empire	410	
Anza-Borrego Springs	139	27,103.0 16,767.2
		10,707.2
Out of County	8,100	
Unknown	1,630	10.100.0
Total	148,526	19,168.8

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*San Diego County total includes 9,730 patients with out of county or unknown zip codes.

#### **Patient Demographics**

While the greatest percentage of patients who were treated and discharged from one of the sixteen EDs represented by this report were between the ages of 25 and 54 years of age (42%), the highest rates of discharge were among the very young and the very old. Eleven percent of ED discharge patients were under five years of age (30,272 per 100,000). Beginning with patients aged 65 to 74 years, the rate of ED discharge increased sharply with increasing age. Patients aged 85 years and older were discharged from an ED at a rate of 35,851 per 100,000 in the population. As found during the third quarter of 2005, there was a slight increase in rate among patients aged 20 to 24 years (21,515 per 100,000), when compared to 5 to 19 and 25 to 64 year old patients. Note: Rates do not include patients who were admitted to the hospital from the ED.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges.

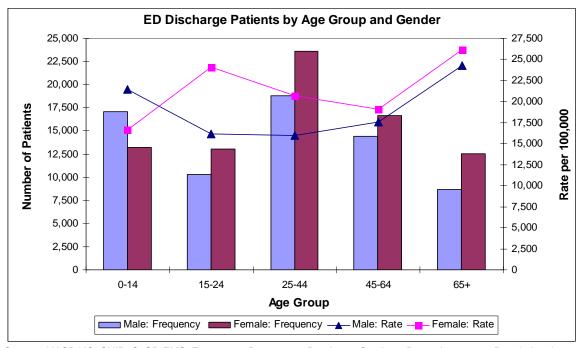
# Number and Rate of Patients Discharged from the ED by Age Group

Age Group	Frequency	Percent	Rate
0-4	16,928	11.4	30,271.5
5-9	6,660	4.5	13,679.3
10-14	6,765	4.6	12,353.2
15-19	10,456	7.0	18,074.6
20-24	12,921	8.7	21,514.6
25-34	21,383	14.4	18,426.5
35-44	21,063	14.2	18,129.9
45-54	19,538	13.2	19,027.5
55-64	11,582	7.8	17,300.5
65-74	8,078	5.4	19,935.2
75-84	8,801	5.9	28,359.2
85+	4,351	2.9	35,850.5
Total	148,526	100.0	19,470.6

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges.

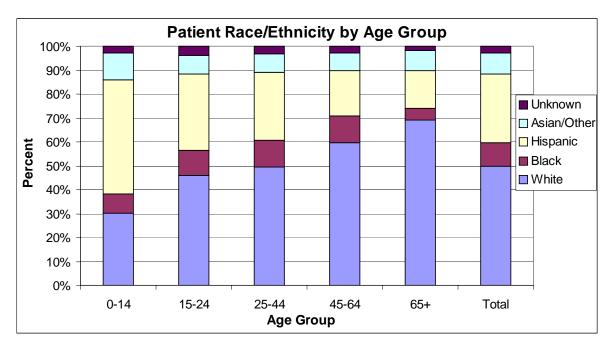
Overall, 53% of ED discharge patients were female. While patients aged 15 years and older were more often female than male, a higher percentage of patients aged 0 to 14 years were male (56%). Fifty six percent of 15 to 44 year old, 54% of 45 to 64 year old, and 53% of 65+ year old patients were female.

The highest rates of discharge from the ED occurred among females aged 15 to 24 years (24,141 per 100,000) and among both males (24,290 per 100,000) and females (26,171 per 100,000) aged 65+ years. Males aged 0 to 14 years also had a relatively high rate of ED discharge (21,425 per 100,000).

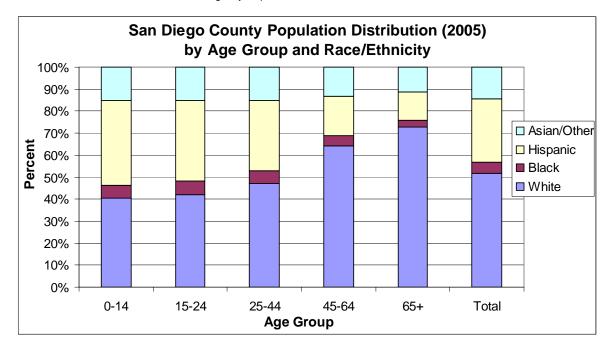


Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*\*Excludes 44 patients with missing gender.

Overall, the distribution of patients discharged from the ED by race/ethnicity was similar to the distribution of the San Diego County population. Black ED discharge patients (10%) were overrepresented when compared to the population (5%). Among children aged 0 to 14 years in the population, 38% were Hispanic, compared to 48% of ED patients of the same age.

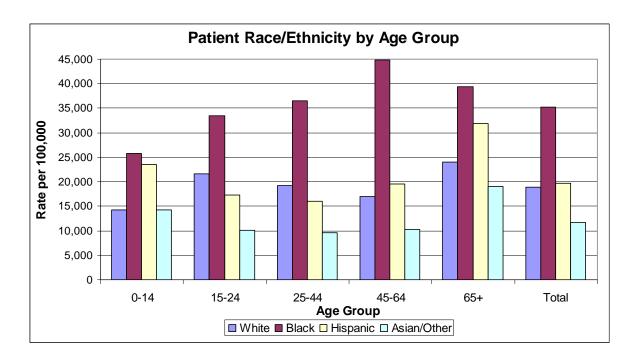


Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.



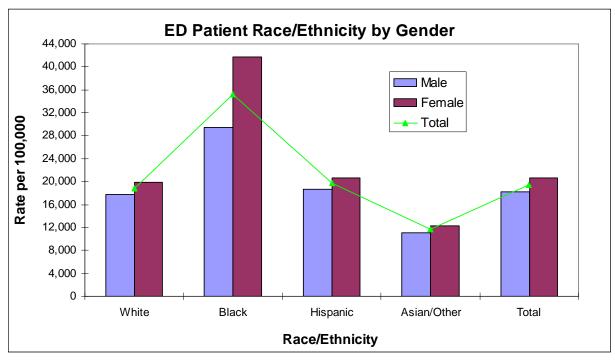
Source: SANDAG, 2005 Population Estimates.

Across all age groups, the rate of ED discharge was significantly higher for Black patients than for any other racial/ethnic group. In the 45 to 64 year age group, Black patients were discharged from the ED at an annual rate of 44,761 per 100,000 in the population; or for every 100 Black residents, 45 patients were treated and discharged from a participating San Diego County ED. The rate of discharge for Black patients increased with age through 45 to 64 years, while the rate of discharge for all other racial/ethnic groups generally decreased with increasing age through the 45 to 64 year age group. Hispanic and Black patients aged 0 to 14 years had similar rates of ED discharge.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*\*Excludes 4,212 patients with missing race/ethnicity.

Across all racial/ethnic groups, females had a higher rate of ED discharge than males. This was most apparent among the Black population.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*\*Excludes 4,212 patients with missing race/ethnicity.

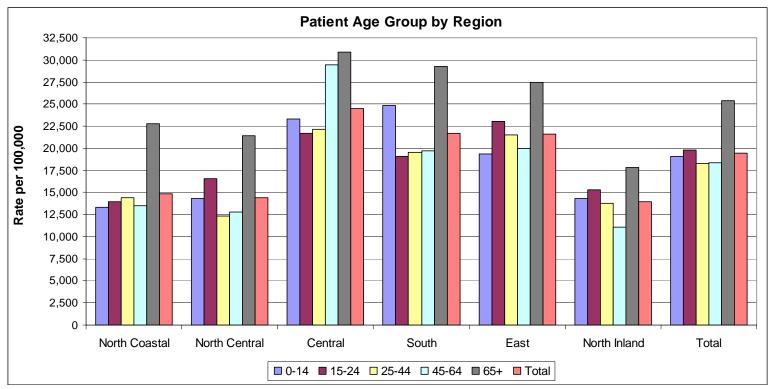
The table below describes the frequency and rate of discharge of ED patients in San Diego County by age group, race/ethnicity, and gender from October through December, 2005. The highest annual rate of treatment and discharge from the ED was among Black females, aged 45 to 64 years. For every ten women in this category, five were treated and discharged from an emergency department in San Diego County.

Age Group and Gender by Race/Ethnicity, Rates per 100,000

Age		Wh	ite	Bla	ck	Hisp	anic	Asian	Other/	To	tal
Group		Frequency	Rate								
	Male	5,132	16,286.9	1,416	29,050.6	8,135	26,320.0	1,971	15,706.1	17,106	21,424.9
0-14	Female	4,036	12,311.4	1,028	22,186.3	6,295	20,772.0	1,515	12,830.8	13,230	16,635.4
	Total	9,174	14,269.1	2,445	25,715.9	14,434	23,579.9	3,488	14,320.5	30,353	19,045.6
	Male	4,879	17,756.8	992	23,941.1	3,261	14,063.6	814	8,877.7	10,348	16,174.6
15-24	Female	5,899	26,527.0	1,455	45,736.7	4,208	21,092.7	986	11,518.4	13,019	24,140.9
	Total	10,782	21,687.8	2,448	33,420.9	7,471	17,319.0	1,802	10,164.0	23,377	19,826.8
	Male	9,783	17,078.0	1,903	26,724.7	5,103	13,711.7	1,351	8,173.8	18,851	15,955.1
25-44	Female	11,251	21,467.7	2,831	48,384.9	6,904	18,419.5	1,990	10,855.9	23,588	20,678.0
	Total	21,039	19,179.8	4,734	36,494.7	12,007	16,074.0	3,342	9,587.1	42,446	18,278.1
	Male	9,019	16,592.4	1,534	38,550.0	2,579	18,577.3	920	9,050.2	14,470	17,564.2
45-64	Female	9,488	17,370.4	1,971	51,178.2	3,373	20,464.7	1,368	11,130.8	16,642	19,075.0
	Total	18,514	16,988.8	3,505	44,760.9	5,952	19,601.8	2,288	10,188.9	31,120	18,345.9
	Male	6,131	23,153.1	406	35,000.0	1,292	29,687.5	741	19,101.6	8,713	24,289.5
65+	Female	8,539	24,754.0	629	42,979.2	2,084	33,388.1	1,065	18,951.9	12,515	26,170.9
	Total	14,671	24,060.4	1,035	39,451.1	3,376	31,867.8	1,807	19,023.6	21,230	25,366.9
	Male	34,944	17,728.4	6,251	29,378.1	20,370	18,594.8	5,797	11,085.9	69,488	18,275.6
Total	Female	39,213	19,951.0	7,914	41,695.4	22,864	20,698.7	6,924	12,231.4	78,994	20,646.8
	Total	74,180	18,843.9	14,167	35,190.3	43,240	19,653.9	12,727	11,686.9	148,526	19,470.6

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*\*Total includes 4,212 patients with missing race/ethnicity, and 44 patients with missing gender.

The annual rate of discharge by age group varies within each Region. Overall in San Diego County, patients aged 65 years and older were discharged at a higher rate than any other age group (25,377 per 100,000). Patients aged 45 to 64 years living in the Central Region also had a high rate of ED discharge (29,419 per 100,000) compared to each of the other Regions. This is likely due to the high percentage of working poor living in the Central Region who were not yet eligible for Medicare, and thus used the ED as a primary source of care. A high rate of ED discharge also occurred among 0 to 14 year old children in both the South (24,837 per 100,000) and Central (23,358 per 100,000) Regions. Next to the elderly, patients aged 15 to 24 years had the highest rates of ED discharge in the East (23,016 per 100,000), North Central (16,581 per 100,000), and North Inland Regions (15,315 per 100,000).



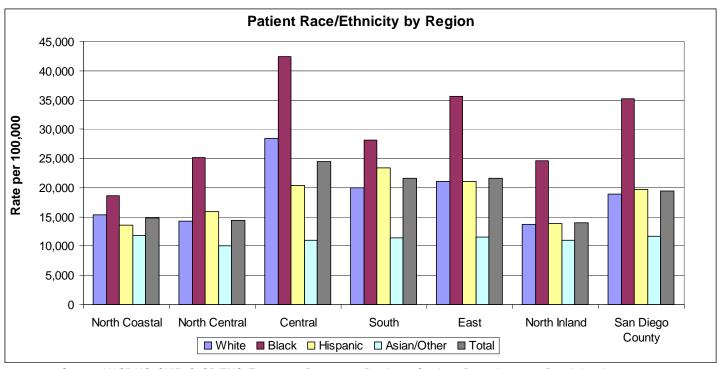
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#### Patient Region of Residence by Age Group, Rates per 100,000

	North Coastal		North Central		Central		South		East		North Inland		San Dieg	o County
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
0-14	3,620	13,320.3	3,661	14,289.9	6,331	23,357.5	6,337	24,836.9	4,646	19,351.7	4,300	14,358.7	30,353	19,045.6
15-24	2,809	13,983.6	3,293	16,581.3	4,415	21,713.2	3,940	19,130.2	3,846	23,016.2	3,112	15,315.3	23,377	19,826.8
25-44	5,080	14,397.5	6,364	12,347.5	9,484	22,175.6	6,547	19,520.1	6,889	21,497.9	5,091	13,742.5	42,446	18,278.1
45-64	3,751	13,543.0	4,385	12,785.8	6,964	29,419.0	4,456	19,684.4	5,634	20,029.5	3,664	11,036.6	31,120	18,345.9
65+	3,215	22,769.1	3,754	21,383.3	3,209	30,838.7	3,363	29,300.8	3,610	27,455.6	3,026	17,816.5	21,230	25,366.9
Total	18,475	14,855.4	21,457	14,413.1	30,403	24,462.7	24,643	21,661.4	24,625	21,593.3	19,193	13,959.1	148,526	19,470.6

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*San Diego County total includes 9,730 patients with out of county or unknown zip codes.

The annual rate of ED discharge by race/ethnicity also varies within each Region. For every Region, Blacks had a higher rate of discharge from the ED than any other racial/ethnic category. White patients were discharged at higher rates than Hispanic patients in the North Coastal and Central Regions, and Hispanic patients were discharged at higher rates than White patients in the North Central and South Regions.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*San Diego County total includes 9,730 patients with out of county or unknown zip codes. Totals also include 4,212 patients with missing race/ethnicity.

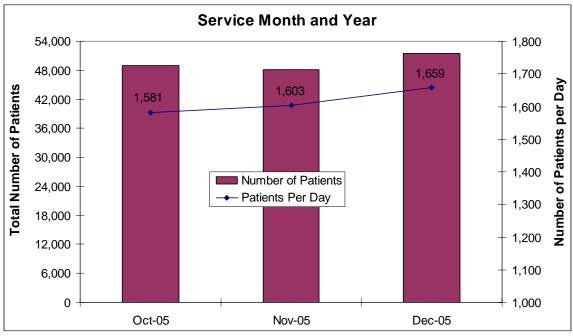
#### Patient Race/Ethnicity by Region, Rates per 100,000

								,	P	-,				
	North Coastal		North Central		Central		South		East		North Inland		San Dieg	o County
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
White	11,529	15,396.5	13,620	14,279.5	9,847	28,391.2	6,095	20,042.7	15,870	21,027.9	11,428	13,797.3	74,180	18,843.9
Black	897	18,648.6	1,208	25,117.0	7,077	42,470.1	1,503	28,100.0	2,118	35,637.1	659	24,559.8	14,167	35,190.3
Hispanic	4,561	13,533.5	2,881	15,952.8	10,270	20,420.3	13,898	23,320.7	4,746	21,074.4	4,981	13,898.6	43,240	19,653.9
Asian/Other	1,299	11,837.9	3,062	9,999.7	2,494	11,014.2	2,108	11,449.7	1,161	11,488.5	1,780	11,024.7	12,727	11,686.9
Total	18,475	14,855.4	21,457	14,413.1	30,403	24,462.7	24,643	21,661.4	24,625	21,593.3	19,193	13,959.1	148,526	19,470.6

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population for all patients. Totals do not include <3% of all civilian ED discharges. \*San Diego County total includes 9,730 patients with out of county or unknown zip codes. Totals also include 4,212 patients with missing race/ethnicity.

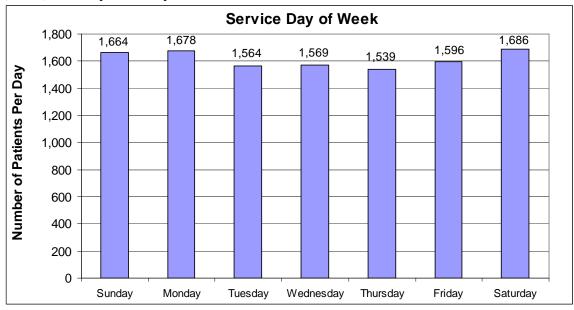
#### Month and Day of Week

There were more patients discharged per day from participating San Diego County emergency departments in December than in October or November. The average number of patients discharged per day was 1,659 in December, 1,603 in November, and 1,581 in October.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.

There were slightly more patients discharged per day on Saturdays (1,686) and Mondays (1,678) than any other day of the week.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.

#### **Patient Disposition**

Nearly all (94%) patients who were treated and discharged from the emergency department were sent home for self care. *Note: ED data does not include patients who were admitted to the hospital from the emergency department. Typically, between 12 percent and 20 percent of all patients who present to the ED are admitted to the hospital.* 

**Patient Disposition** 

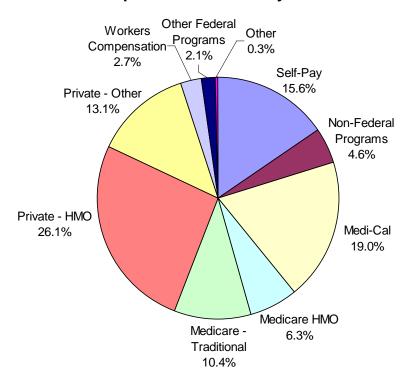
	Frequency	Percent
Home for Self Care	126,756	93.5
Left Facility AMA	3,058	2.3
Transfer to Another Hospital	2,319	1.7
Other	1,319	1.0
DC to psych hospital or unit	778	0.6
SNF	743	0.5
Expired	280	0.2
Transfer to other inpatient facility	159	0.1
ICF	82	0.1
DC to other rehab facility	41	0.0
Home under care of organized home health service org	29	0.0
DC to federal hospital	13	0.0
DC to medical facility with hospice care	13	0.0
Home with hospice care	7	0.0
DC to LTC	4	0.0
Home under care of home IV provider	2	0.0
DC to NF under MediCal, not Medicare	2	0.0
DC to hospital based medicare approved swing bed	1	0.0
Total	135,606	100.0

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. \*Total excludes 12,920 patients with missing disposition.

#### **Expected Source of Payment**

Among patients discharged from the participating emergency departments, nearly all (>99%) reported an expected source of payment. Of those with a known payment source, 17% were covered by Medicare and 19% by Medi-Cal. Sixteen percent of all patients were self-pay, and 39% were privately insured. The self-pay category includes those individuals without health insurance either by choice or circumstance. See Appendix B for a detailed description of the payment categories displayed below.

#### **Expected Source of Payment**



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. \*Excludes 8 patients with missing payor source.

<sup>\*\*</sup>As defined by OSHPD, Patients included in the self-pay category are those for whom payment is expected to be made directly by the patient, guarantor, relatives, or friends. The greatest share of the patient's bill is not expected to be paid by any form of insurance or other third party.

The table below describes patient expected source of payment by age group. One-quarter of all patients aged 15 to 24 years were self-pay, compared to 22% of patients aged 25 to 44 years, and 11% of patients aged 0 to 14 years. Medi-Cal was expected to cover 38% of all children aged 0 to 14 years, compared to 20% of 15 to 24 year old, 16% of 25 to 44 year old, and 15% of 45 to 64 year old patients. Ninety percent of patients aged 65 years and older were covered by Medicare.

**Expected Source of Payment by Age Group** 

	0-	14	15	-24	25	-44	45	-64	6	5+	To	tal
	Freq.	Percent	Freq.	Percent								
Self-Pay	3,361	11.1	5,781	24.7	9,358	22.0	4,285	13.8	408	1.9	23193	15.6
Non-Federal Programs	1,110	3.7	928	4.0	2,739	6.5	2,025	6.5	14	0.1	6,816	4.6
Medi-Cal	11,496	37.9	4,704	20.1	6,841	16.1	4,763	15.3	402	1.9	28,206	19.0
Medicare HMO	16	0.1	9	0.0	146	0.3	537	1.7	8,633	40.7	9,338	6.3
Medicare - Traditional	0	0.0	89	0.4	1,625	3.8	3,233	10.4	10,465	49.3	15,415	10.4
Private - HMO	9,577	31.6	6,433	27.5	11,965	28.2	9,986	32.1	776	3.7	38,737	26.1
Private - Other	3,868	12.7	3,697	15.8	6,855	16.2	4,587	14.7	400	1.9	19,407	13.1
Workers Compensation	0	0.0	845	3.6	1,952	4.6	1,072	3.4	67	0.3	3,936	2.7
Other Federal Programs	859	2.8	794	3.4	821	1.9	542	1.7	39	0.2	3,055	2.1
Other	64	0.2	95	0.4	142	0.3	89	0.3	25	0.1	415	0.3
Total	30,351	100.0	23,375	100.0	42,444	100.0	31,119	100.0	21,229	100.0	148,518	100.0
Missing Payor Source	2		2		2		1		1		8	
Age Group Totals	30,353		23,377		42,446		31,120		21,230		148,526	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005.

The table below describes patient expected source of payment by race/ethnicity. Nearly 20% of Hispanic patients and more than 18% of Black patients were self-pay, compared to 13% of White and 12% of Asian/other patients. Seven percent of Black patients were covered by non-Federal programs, compared to less than 4% of Asian/other patients. Forty-five percent of White patients and 46% of Asian/other patients were privately insured, compared to just 26% of Black and 31% of Hispanic patients.

**Expected Source of Payment by Race/Ethnicity** 

	WI	hite	Bla	ack	Hisp	anic	Asian	/Other	Unkı	nown	To	tal
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Self-Pay	9,738	13.1	2,597	18.3	8,483	19.6	1,537	12.1	838	19.9	23,193	15.6
Non-Federal Programs	3,199	4.3	988	7.0	2,081	4.8	448	3.5	100	2.4	6,816	4.6
Medi-Cal	7,840	10.6	4,481	31.6	13,154	30.4	2,381	18.7	350	8.3	28,206	19.0
Medicare HMO	7,166	9.7	409	2.9	1,161	2.7	393	3.1	209	5.0	9,338	6.3
Medicare-Traditional	9,834	13.3	1,357	9.6	2,668	6.2	1,432	11.3	124	2.9	15,415	10.4
Private-HMO	20,509	27.6	2,761	19.5	10,067	23.3	3,428	26.9	1,972	46.9	38,737	26.1
Private-Other	12,328	16.6	871	6.1	3,456	8.0	2,364	18.6	388	9.2	19,407	13.1
Workers Compensation	1,741	2.3	253	1.8	1,467	3.4	360	2.8	115	2.7	3,936	2.7
Other federal programs	1,677	2.3	371	2.6	594	1.4	351	2.8	62	1.5	3,055	2.1
Other	147	0.2	79	0.6	105	0.2	33	0.3	51	1.2	415	0.3
Total	74,179	100.0	14,167	100.0	43,236	100.0	12,727	100.0	4,209	100.0	148,518	100.0
Missing Payor Source	1		0		4		0		3		8	
Race Totals	74,180		14,167		43,240		12,727		4,212		148,526	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

The table below describes expected source of payment by gender. Eighteen percent of males and 14% of females were self pay, while 21% of females and 17% of males were covered by Medi-Cal.

**Expected Source of Payment by Gender** 

Mala Famala Tatal													
	Ma	ale	Fen	nale	To	tal							
	Freq.	Percent	Freq.	Percent	Freq.	Percent							
Self-Pay	12,247	17.6	10,931	13.8	23,193	15.6							
Non-Federal Programs	3,956	5.7	2,860	3.6	6,816	4.6							
Medi-Cal	11,511	16.6	16,695	21.1	28,206	19.0							
Medicare HMO	3,815	5.5	5,523	7.0	9,338	6.3							
Medicare-Traditional	6,803	9.8	8,609	10.9	15,415	10.4							
Private-HMO	17,754	25.6	20,971	26.5	38,737	26.1							
Private-Other	9,460	13.6	9,940	12.6	19,407	13.1							
Workers Compensation	2,429	3.5	1,504	1.9	3,936	2.7							
Other federal programs	1,316	1.9	1,735	2.2	3,055	2.1							
Other	191	0.3	224	0.3	415	0.3							
Total	69,482	100.0	78,992	100.0	148,518	100.0							
Missing Payor Source	6		2		8								
Gender Totals	69,488		78,994		148,526								

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. \*Includes 44 patients with unknown gender.

The table below describes expected source of payment by region of residence. Patients are described as underinsured if they are expected to be either self-pay or covered by non-Federal programs or Medi-Cal. Fifty-six percent of ED discharge patients living in the Central Region were underinsured (19% self-pay, 30% Medi-Cal), compared to 27% in the North Central (11% self-pay, 11% Medi-Cal) and 27% in the North Inland (15% Self-Pay, 10% Medi-Cal) Regions. Twenty-four percent of patients living outside of San Diego County were self-pay.

**Expected Source of Payment by Region** 

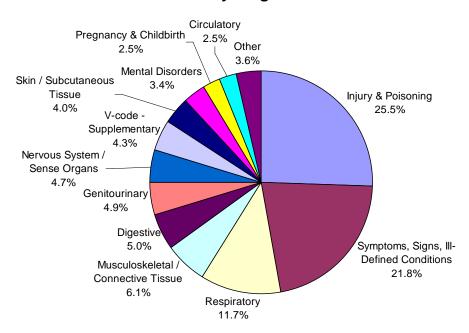
	Expedica course of Layment by Region															
	North (	Coastal	North	Central	Cer	ntral	So	uth	E	ast	North	Inland	Out of	County	Unkı	nown
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Self-Pay	3,026	16.4	2,423	11.3	5,632	18.5	3,296	13.4	2,892	11.7	2,915	15.2	1,938	23.9	1,071	65.8
Non-Federal Programs	209	1.1	970	4.5	2,221	7.3	1,272	5.2	1,529	6.2	263	1.4	191	2.4	161	9.9
Medi-Cal	2,886	15.6	2,407	11.2	9,088	29.9	6,451	26.2	4,709	19.1	1,902	9.9	667	8.2	96	5.9
Medicare HMO	1,131	6.1	1,857	8.7	1,303	4.3	1,295	5.3	2,145	8.7	1,418	7.4	175	2.2	14	0.9
Medicare-Traditional	2,107	11.4	2,144	10.0	3,300	10.9	2,603	10.6	2,401	9.8	1,958	10.2	844	10.4	58	3.6
Private-HMO	4,069	22.0	6,412	29.9	5,771	19.0	6,422	26.1	8,112	32.9	6,487	33.8	1,407	17.4	57	3.5
Private-Other	3,598	19.5	4,210	19.6	2,004	6.6	2,214	9.0	1,938	7.9	2,929	15.3	2,414	29.8	100	6.1
Workers Compensation	1,009	5.5	458	2.1	595	2.0	579	2.3	465	1.9	605	3.2	212	2.6	13	0.8
Other Federal Programs	383	2.1	523	2.4	337	1.1	489	2.0	380	1.5	698	3.6	231	2.9	14	0.9
Other	57	0.3	53	0.2	152	0.5	22	0.1	54	0.2	12	0.1	21	0.3	44	2.7
Total	18,475	100.0	21,457	100.0	30,403	100.0	24,643	100.0	24,625	100.0	19,187	100.0	8,100	100.0	1,628	100.0
Missing Payor Source	0		0		0		0		0		6		0		2	
Region Totals	18,475		21,457		30,403		24,643		24,625		19,193		8,100		1,630	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

#### **Primary Diagnosis**

Primary diagnosis was reported for nearly all ED discharge patients. Among the diagnoses that were reported, ED patients were treated and discharged for a diagnosis represented by the following categories. Twelve percent of patients were diagnosed with respiratory diseases, compared to just 6% in the third quarter aggregate report. See Appendix C for a description of each category.

#### **Primary Diagnosis**



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005. \*Excludes 432 patients with missing primary diagnosis.

The fifteen most common diagnoses among patients treated and discharged from the ED are listed below. Acute respiratory infections were the most common primary diagnosis (5.9%), and include the common cold, sore throat, tonsillitis, laryngitis, and acute bronchitis. General symptoms (5.3%) include altered consciousness, hallucinations, syncope, convulsions, dizziness, sleep disturbances, fever, and general malaise and fatigue. Respiratory symptoms (5.0%) represent undiagnosed wheezing, cough, painful respiration, and other discomfort in the chest.

Sprains and strains of joints and muscles was the fourth most common diagnosis group (4.6%). This diagnosis was the most common primary diagnosis during the second and third quarters of 2005. Abdominal symptoms (4.5%) refer to abdominal tenderness or pain, which is otherwise unclassifiable. Chronic obstructive pulmonary disease (COPD) and allied conditions (3.4%) refer to asthma, chronic bronchitis, emphysema, and other chronic obstructive lung diseases.

ED diagnoses of other diseases of the urinary system (3.1%) were mainly kidney stones, kidney infections, urinary tract infections, and cystitis. Dorsopathies (3.0%) refer to disorders of the back and cervical region. Infections of skin and subcutaneous tissue (2.6%) include boils, cellulitis and abscesses, cysts, and other local infections of the skin. Neurotic, personality and other nonpsychotic mental disorders (2.5%) included neurotic disorders, non-dependent abuse of drugs, and other depressive disorders. Head and neck symptoms (2.2%) are diagnosed for general headache, neck pain, swelling, or voice and speech disturbances.

### Primary Diagnosis 15 Most Common Diagnoses

Primary Diagnosis	Frequency	Percent
460-466 ACUTE RESPIRATORY INFECTIONS	8,772	5.9
780 GENERAL SYMPTOMS*	7,936	5.3
786 RESPIRATORY SYMPTOMS*	7,372	5.0
840-848 SPRAINS AND STRAINS OF JOINTS AND MUSCLES	6,829	4.6
789 ABDOMINAL SYMPTOMS*	6,718	4.5
920-924 CONTUSION WITH INTACT SKIN SURFACE	5,367	3.6
490-496 COPD AND ALLIED CONDITIONS	5,090	3.4
590-599 OTHER DISEASES OF URINARY SYSTEM	4,671	3.1
870-879 OPEN WOUND OF HEAD, NECK, TRUNK	4,599	3.1
720-724 DORSOPATHIES	4,420	3.0
680-686 INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	3,792	2.6
880-887 OPEN WOUND OF UPPER LIMB	3,754	2.5
300-316 NEUROTIC, PERSONALITY, OTHER NONPSYCHOTIC MENTAL DIS	3,658	2.5
810-819 FRACTURE OF UPPER LIMB	3,432	2.3
784 HEAD AND NECK SYMPTOMS*	3,334	2.2

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December, 2005.

The tables below describe the primary diagnosis by age group. Thirty percent of diagnoses among children aged 0 to 14 years were for injuries or poisoning, 24% were for respiratory diseases, and 19% were for symptoms, signs, and ill-defined conditions. The rate of discharge from the ED with a primary diagnosis of respiratory disease was 4,551 per 100,000 among 0 to 14 year old patients, compared to 2,356 per 100,000 among 65+ year olds, and 1,446 per 100,000 among 45 to 64 year old patients.

**Primary Diagnosis by Age Group** 

	0-	14	15	15-24		25-44		-64	65+		To	otal
	Freq.	Percent	Freq.	Percent								
Infectious and Parasitic Diseases	688	2.3	358	1.5	467	1.1	256	0.8	157	0.7	1,926	1.3
Neoplasms	9	0.0	15	0.1	54	0.1	85	0.3	80	0.4	243	0.2
Endocrine, Nutrition, Metabolic	440	1.5	198	0.8	514	1.2	678	2.2	705	3.3	2,535	1.7
Disease of Blood & Blood Forming Organs	53	0.2	35	0.2	78	0.2	64	0.2	71	0.3	301	0.2
Mental Disorders	140	0.5	968	4.2	2,070	4.9	1,395	4.5	450	2.1	5,023	3.4
Diseases of Nervous System/Sense Organs	2,320	7.7	768	3.3	1,889	4.5	1,410	4.5	603	2.8	6,990	4.7
Circulatory	30	0.1	117	0.5	546	1.3	1,154	3.7	1,802	8.5	3,649	2.5
Respiratory	7,253	24.0	2,240	9.6	3,448	8.2	2,453	7.9	1,972	9.3	17,366	11.7
Digestive	1,592	5.3	986	4.2	2,085	4.9	1,651	5.3	1,154	5.5	7,468	5.0
Genitourinary	639	2.1	1,465	6.3	2,496	5.9	1,568	5.1	1,022	4.8	7,190	4.9
Pregnancy, Childbirth, Peurperium	9	0.0	1,524	6.5	2,129	5.0	17	0.1	0	0.0	3,679	2.5
Skin/Subcutaneous Tissue	824	2.7	1,024	4.4	2,179	5.2	1,379	4.4	492	2.3	5,898	4.0
Musculoskeletal/Connective Tissue	441	1.5	945	4.1	3,076	7.3	3,004	9.7	1,623	7.7	9,089	6.1
Congenital Anomalies	61	0.2	17	0.1	14	0.0	12	0.0	4	0.0	108	0.1
Perinatal Conditions	280	0.9	1	0.0	0	0.0	1	0.0	0	0.0	282	0.2
Symptoms, Signs, III-Defined Conditions	5,773	19.1	3,962	17.0	9,086	21.5	7,677	24.7	5,767	27.2	32,265	21.8
Injury and Poisoning	8,999	29.7	7,521	32.3	9,889	23.4	6,669	21.5	4,622	21.8	37,700	25.5
V-Code - Supplementary	731	2.4	1,151	4.9	2,284	5.4	1,573	5.1	643	3.0	6,382	4.3
Group Total	30,282	100.0	23,295	100.0	42,304	100.0	31,046	100.0	21,167	100.0	148,094	100.0

Primary Diagnosis by Age Group, Rates per 100,000

Primary Diagnosis by Age Group, Rates per 100,000													
	0-	14	15	-24	25	-44	45	-64	6	5+	To	otal	
	Freq.	Rate	Freq.	Rate									
Infectious and Parasitic Diseases	688	431.7	358	303.6	467	201.1	256	150.9	157	187.6	1,926	252.5	
Neoplasms	9	5.6	15	12.7	54	23.3	85	50.1	80	95.6	243	31.9	
Endocrine, Nutrition, Metabolic	440	276.1	198	167.9	514	221.3	678	399.7	705	842.4	2,535	332.3	
Disease of Blood & Blood Forming Organs	53	33.3	35	29.7	78	33.6	64	37.7	71	84.8	301	39.5	
Mental Disorders	140	87.8	968	821.0	2,070	891.4	1,395	822.4	450	537.7	5,023	658.5	
Diseases of Nervous System/Sense Organs	2,320	1,455.7	768	651.4	1,889	813.4	1,410	831.2	603	720.5	6,990	916.3	
Circulatory	30	18.8	117	99.2	546	235.1	1,154	680.3	1,802	2,153.1	3,649	478.4	
Respiratory	7,253	4,551.0	2,240	1,899.8	3,448	1,484.8	2,453	1,446.1	1,972	2,356.3	17,366	2,276.6	
Digestive	1,592	998.9	986	836.3	2,085	897.8	1,651	973.3	1,154	1,378.9	7,468	979.0	
Genitourinary	639	401.0	1,465	1,242.5	2,496	1,074.8	1,568	924.4	1,022	1,221.1	7,190	942.6	
Pregnancy, Childbirth, Peurperium	9	5.6	1,524	1,292.6	2,129	916.8	17	10.0	0	-	3,679	482.3	
Skin/Subcutaneous Tissue	824	517.0	1,024	868.5	2,179		1,379	813.0	492		5,898		
Musculoskeletal/Connective Tissue	441	276.7	945	801.5	3,076	1,324.6	3,004	1,770.9	1,623	1,939.3	9,089	1,191.5	
Congenital Anomalies	61	38.3	17	14.4	14	6.0	12	7.1	4	*	108	14.2	
Perinatal Conditions	280	175.7	1	*	0		1	*	0	-	282	37.0	
Symptoms, Signs, Ill-Defined Conditions	5,773	3,622.4	3,962	3,360.3	9,086	3,912.6	7,677	4,525.8	5,767	6,890.8	32,265	4,229.7	
Injury and Poisoning	8,999	5,646.6	7,521	6,378.8	9,889	4,258.4	6,669	3,931.5	4,622	5,522.6	37,700	4,942.2	
V-Code - Supplementary	731	458.7	1,151	976.2	2,284	983.5	1,573		643	768.3	6,382		
Group Total	30,282	19,001.0	23,295	19,757.3	42,304	18,217.0	31,046	18,302.3	21,167	25,291.6	148,094	19,414.0	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Excludes 432 patients with missing primary diagnosis.

The tables below describe the primary diagnosis by race/ethnicity. Black patients were discharged from the ED with a primary diagnosis of respiratory disease at a rate of 4,891 per 100,000 in the population, compared to White patients at a rate of 1,831 per 100,000 in the population. Hispanic patients had the highest percentage of diagnoses related to pregnancy and childbirth (4%), but Black patients had the highest rate of pregnancy and childbirth related diagnoses (959 per 100,000).

**Primary Diagnosis by Race/Ethnicity** 

	WI	nite	Bla	ack	Hisp	anic	Asian	Other/	Unk	nown	To	otal
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Infectious and Parasitic Diseases	688	0.9	284	2.0	722	1.7	182	1.4	50	1.2	1,926	1.3
Neoplasms	129	0.2	30	0.2	63	0.1	18	0.1	3	0.1	243	0.2
Endocrine, Nutrition, Metabolic	1,241	1.7	287	2.0	716	1.7	256	2.0	35	0.9	2,535	1.7
Disease of Blood & Blood Forming Organs	131	0.2	63	0.4	75	0.2	28	0.2	4	0.1	301	0.2
Mental Disorders	3,113	4.2	372	2.6	1,119	2.6	285	2.2	134	3.3	5,023	3.4
Diseases of Nervous System/Sense Organs	3,293	4.4	681	4.8	2,196	5.1	621	4.9	199	4.8	6,990	4.7
Circulatory	2,241	3.0	327	2.3	651	1.5	338	2.7	92	2.2	3,649	2.5
Respiratory	7,206	9.7	1,969	13.9	6,042	14.0	1,737	13.7	412	10.0	17,366	11.7
Digestive	3,412	4.6	681	4.8	2,490	5.8	680	5.4	205	5.0	7,468	5.0
Genitourinary	3,641	4.9	648		2,093	4.9	607	4.8	201	4.9	7,190	
Pregnancy, Childbirth, Peurperium	1,132	1.5	386	2.7	1,750		307	2.4	104	_	3,679	
Skin/Subcutaneous Tissue	3,080	4.2	631	4.5	1,637	3.8	436	3.4	114	2.8	5,898	4.0
Musculoskeletal/Connective Tissue	5,148	7.0	1,092	7.7	2,058	4.8	573	4.5	218	5.3	9,089	6.1
Congenital Anomalies	43	0.1	6	0.0	44	0.1	13	0.1	2	0.0	108	0.1
Perinatal Conditions	63	0.1	23	0.2	155	0.4	33	0.3	8	0.2	282	0.2
Symptoms, Signs, III-Defined Conditions	15,914	21.5	3,099	21.9	9,247	21.4	3,029	23.8	976	23.8	32,265	21.8
Injury and Poisoning	20,376	27.5	2,804	19.8	10,290	23.8	3,047	24.0	1,183	28.8	37,700	25.5
V-Code - Supplementary	3,151	4.3	754	5.3	1,797	4.2	516	4.1	164	4.0	6,382	4.3
Group Total	74,002	100.0	14,137	100.0	43,145	100.0	12,706	100.0	4,104	100.0	148,094	100.0

#### Primary Diagnosis by Race/Ethnicity, Rates per 100,000

Triniary Biagnosis by Racco Ethnorry, Racco per 100,000												
	Wh	nite	Bla	ack	Hisp	anic	Asian/	Other	To	tal		
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate		
Infectious and Parasitic Diseases	688	174.8	284	705.4	722	328.2	182	167.1	1,926	252.5		
Neoplasms	129	32.8	30	74.5	63	28.6	18	16.5	243	31.9		
Endocrine, Nutrition, Metabolic	1,241	315.3	287	712.9	716	325.4	256	235.1	2,535	332.3		
Disease of Blood & Blood Forming Organs	131	33.3	63	156.5	75	34.1	28	25.7	301	39.5		
Mental Disorders	3,113	790.8	372	924.0	1,119	508.6	285	261.7	5,023	658.5		
Diseases of Nervous System/Sense Organs	3,293	836.5	681	1,691.6	2,196	998.1	621	570.2	6,990	916.3		
Circulatory	2,241	569.3	327	812.3	651	295.9	338	310.4	3,649	478.4		
Respiratory	7,206	1,830.5	1,969	4,890.9	6,042	2,746.3	1,737	1,595.0	17,366	2,276.6		
Digestive	3,412	866.8	681	1,691.6	2,490	1,131.8	680	624.4	7,468	979.0		
Genitourinary	3,641	924.9	648	1,609.6	2,093	951.3	607	557.4	7,190	942.6		
Pregnancy, Childbirth, Peurperium	1,132	287.6	386	958.8	1,750	795.4	307	281.9	3,679	482.3		
Skin/Subcutaneous Tissue	3,080	782.4	631	1,567.4	1,637	744.1	436	400.4	5,898	773.2		
Musculoskeletal/Connective Tissue	5,148	1,307.7	1,092	2,712.5	2,058	935.4	573	526.2	9,089	1,191.5		
Congenital Anomalies	43	10.9	6	14.9	44	20.0	13	11.9	108	14.2		
Perinatal Conditions	63	16.0	23	57.1	155	70.5	33	30.3	282	37.0		
Symptoms, Signs, Ill-Defined Conditions	15,914	4,042.6	3,099	7,697.8	9,247	4,203.0	3,029	2,781.5	32,265	4,229.7		
Injury and Poisoning	20,376	5,176.1	2,804	6,965.0	10,290	4,677.1	3,047	2,798.0	37,700	4,942.2		
V-Code - Supplementary	3,151	800.4	754	1,872.9	1,797	816.8	516	473.8	6,382	836.6		
Group Total	74,002	18,798.7	14,137	35,115.8	43,145	19,610.7	12,706	11,667.6	148,094	19,414.0		

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Total excludes 432 patients with missing primary diagnosis, and includes 4,104 with missing race/ethnicity.

The tables below describe primary diagnosis by gender. Male patients were discharged from the ED for an injury or poisoning at a rate of 5,457 per 100,000, compared to female patients at a rate of 4,427 per 100,000 in the population. The rate of ED discharge with a primary diagnosis of diseases of the nervous system or sense organs was higher for females (1,053 per 100,000) than for males (779 per 100,000).

**Primary Diagnosis by Gender** 

1 Timary Blagnosis by Genaci											
	Ma	ale	Fen	nale	To	otal					
	Freq.	Percent	Freq.	Percent	Freq.	Percent					
Infectious and Parasitic Diseases	886	1.3	1,040	1.3	1,926	1.3					
Neoplasms	97	0.1	146	0.2	243	0.2					
Endocrine, Nutrition, Metabolic	1,231	1.8	1,303	1.7	2,535	1.7					
Disease of Blood & Blood Forming Organs	137	0.2	164	0.2	301	0.2					
Mental Disorders	2,543	3.7	2,478	3.1	5,023	3.4					
Diseases of Nervous System/Sense Organs	2,960	4.3	4,028	5.1	6,990	4.7					
Circulatory	1,778	2.6	1,871	2.4	3,649	2.5					
Respiratory	8,294	12.0	9,067	11.5	17,366	11.7					
Digestive	3,479	5.0	3,986	5.1	7,468	5.0					
Genitourinary	2,185	3.2	5,004	6.4	7,190	4.9					
Pregnancy, Childbirth, Peurperium	0	0.0	3,679	4.7	3,679	2.5					
Skin/Subcutaneous Tissue	3,151	4.5	2,744	3.5	5,898	4.0					
Musculoskeletal/Connective Tissue	4,096	5.9	4,990	6.3	9,089	6.1					
Congenital Anomalies	52	0.1	56	0.1	108	0.1					
Perinatal Conditions	128	0.2	154	0.2	282	0.2					
Symptoms, Signs, Ill-Defined Conditions	13,975	20.2	18,285	23.2	32,265	21.8					
Injury and Poisoning	20,749	30.0	16,938	21.5	37,700	25.5					
V-Code - Supplementary	3,518	5.1	2,863	3.6	6,382	4.3					
Group Total	69,259	100.0	78,796	100.0	148,094	100.0					

#### Primary Diagnosis by Gender, Rates per 100,000

	Ma	ale	Fen	nale	To	tal
	Freq.	Rate	Freq.	Rate	Freq.	Rate
Infectious and Parasitic Diseases	886	233.0	1,040	271.8	1,926	252.5
Neoplasms	97	25.5	146	38.2	243	31.9
Endocrine, Nutrition, Metabolic	1,231	323.8	1,303	340.6	2,535	332.3
Disease of Blood & Blood Forming Organs	137	36.0	164	42.9	301	39.5
Mental Disorders	2,543	668.8	2,478	647.7	5,023	658.5
Diseases of Nervous System/Sense Organs	2,960	778.5	4,028	1,052.8	6,990	916.3
Circulatory	1,778	467.6	1,871	489.0	3,649	478.4
Respiratory	8,294	2,181.4	9,067	2,369.9	17,366	2,276.6
Digestive	3,479	915.0	3,986	1,041.8	7,468	979.0
Genitourinary	2,185	574.7	5,004	1,307.9	7,190	942.6
Pregnancy, Childbirth, Peurperium	0	-	3,679	961.6	3,679	482.3
Skin/Subcutaneous Tissue	3,151	828.7	2,744	717.2	5,898	773.2
Musculoskeletal/Connective Tissue	4,096	1,077.3	4,990	1,304.2	9,089	1,191.5
Congenital Anomalies	52	13.7	56	14.6	108	14.2
Perinatal Conditions	128	33.7	154	40.3	282	37.0
Symptoms, Signs, III-Defined Conditions	13,975	3,675.5	18,285	4,779.2	32,265	4,229.7
Injury and Poisoning	20,749	5,457.1	16,938	4,427.1	37,700	4,942.2
V-Code - Supplementary	3,518	925.2	2,863	748.3	6,382	836.6
Group Total	69,259	18,215.4	78,796	20,595.1	148,094	19,414.0

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Total excludes 432 patients with missing primary diagnosis, and includes 44 with missing gender.

Patients living in the East Region were discharged with a primary diagnosis of injury or poisoning at a rate of 5,654 per 100,000, compared to 3,869 per 100,000 in the North Inland Region. Patients living in the Central Region were discharged with a primary diagnosis of respiratory disease at a rate of 3,073 per 100,000, compared to 1,514 per 100,000 in the North Central Region. A lower percentage of patients in the Central (22%) and South (23%) Regions were diagnosed with an injury or poisoning compared to all other Regions.

**Primary Diagnosis by Region** 

	North (			North Central		Central		South		ast	North Inland		Out of County/Unknown	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Infectious and Parasitic Diseases	278	1.5	174	0.8	517	1.7	525	2.1	247	1.0	62	0.3	123	1.3
Neoplasms	40	0.2	29	0.1	36	0.1	50	0.2	39	0.2	39	0.2	10	0.1
Endocrine, Nutrition, Metabolic	351	1.9	371	1.7	480	1.6	395	1.6	375	1.5	400	2.1	163	1.7
Disease of Blood & Blood Forming Organs	37	0.2	34	0.2	75	0.2	40	0.2	51	0.2	44	0.2	20	0.2
Mental Disorders	663	3.6	616	2.9	962	3.2	648	2.6	828	3.4	763	4.0	543	5.6
Diseases of Nervous System/Sense Organs	734	4.0	960	4.5	1,504	5.0	1,293	5.3	1,192	4.8	857	4.5	450	4.6
Circulatory	604	3.3	602	2.8	608	2.0	603	2.5	599	2.4	464	2.4	169	1.7
Respiratory	2,023	11.0	2,255	10.5	3,819	12.6	3,354	13.6	2,713	11.0	2,144	11.3	1,058	10.9
Digestive	816	4.4	956	4.5	1,539	5.1	1,560	6.3	1,162	4.7	995	5.2	440	4.5
Genitourinary	882	4.8	1,044	4.9	1,413	4.7	1,280	5.2	1,170	4.8	950	5.0	451	4.7
Pregnancy, Childbirth, Peurperium	395	2.1	431	2.0	800	2.6	748	3.0	534	2.2	595	3.1	176	1.8
Skin/Subcutaneous Tissue	665	3.6	803	3.7	1,424	4.7	971	3.9	1,025	4.2	579	3.1	431	4.5
Musculoskeletal/Connective Tissue	932	5.1	1,314	6.1	2,024	6.7	1,482	6.0	1,637	6.7	1,063	5.6	637	6.6
Congenital Anomalies	13	0.1	22	0.1	29	0.1	19	0.1	10	0.0	10	0.1	5	0.1
Perinatal Conditions	24	0.1	29	0.1	71	0.2	63	0.3	47	0.2	42	0.2	6	0.1
Symptoms, Signs, Ill-Defined Conditions	3,892	21.1	4,836	22.6	6,605	21.7	5,161	21.0	5,742	23.3	4,095	21.6	1,934	20.0
Injury and Poisoning	5,181	28.1	5,992	28.0	6,562	21.6	5,600	22.8	6,448	26.2	5,319		2,598	26.8
V-Code - Supplementary	880	4.8	966	4.5	1,904	6.3	811	3.3	789	3.2	562	3.0	470	4.9
Group Total	18,410	100.0	21,434	100.0	30,372	100.0	24,603	100.0	24,608	100.0	18,983	100.0	9,684	100.0

Primary Diagnosis by Region, Rates per 100,000

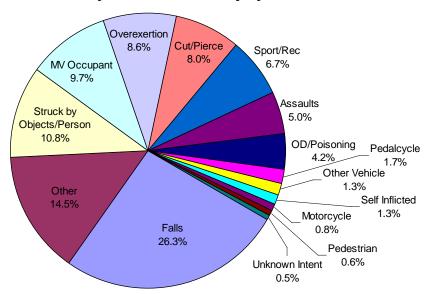
		illiai y Di	agnosis	by iteg	on, rate	o per re	,000					
	North (	Coastal	North (	Central	Cer	ntral	So	uth	Ea	ast	North	Inland
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
Infectious and Parasitic Diseases	278	223.5	174	116.9	517	416.0	525	461.5	247	216.6	62	45.1
Neoplasms	40	32.2	29	19.5	36	29.0	50	44.0	39	34.2	39	28.4
Endocrine, Nutrition, Metabolic	351	282.2	371	249.2	480	386.2	395	347.2	375	328.8	400	290.9
Disease of Blood & Blood Forming Organs	37	29.8	34	22.8	75	60.3	40	35.2	51	44.7	44	32.0
Mental Disorders	663	533.1	616	413.8	962	774.0	648	569.6	828	726.1	763	554.9
Diseases of Nervous System/Sense Organs	734	590.2	960	644.9	1,504	1,210.1	1,293	1,136.6	1,192	1,045.2	857	623.3
Circulatory	604	485.7	602	404.4	608	489.2	603	530.0	599	525.3	464	337.5
Respiratory	2,023	1,626.7	2,255	1,514.7	3,819	3,072.8	3,354	2,948.2	2,713	2,379.0	2,144	1,559.3
Digestive	816	656.1	956	642.2	1,539	1,238.3	1,560	1,371.3	1,162	1,018.9	995	723.7
Genitourinary	882	709.2	1,044	701.3	1,413	1,136.9	1,280	1,125.1	1,170	1,026.0	950	690.9
Pregnancy, Childbirth, Peurperium	395	317.6	431	289.5	800	643.7	748	657.5	534	468.3	595	432.7
Skin/Subcutaneous Tissue	665	534.7	803	539.4	1,424	1,145.8	971	853.5	1,025	898.8	579	421.1
Musculoskeletal/Connective Tissue	932	749.4	1,314	882.6	2,024	1,628.5	1,482	1,302.7	1,637	1,435.5	1,063	773.1
Congenital Anomalies	13	10.5	22	14.8	29	23.3	19	16.7	10	8.8	10	7.3
Perinatal Conditions	24	19.3	29	19.5	71	57.1	63	55.4	47	41.2	42	30.5
Symptoms, Signs, Ill-Defined Conditions	3,892	3,129.5	4,836	3,248.4	6,605	5,314.5	5,161	4,536.6	5,742	5,035.1	4,095	2,978.3
Injury and Poisoning	5,181	4,166.0	5,992	4,024.9	6,562	5,279.9	5,600	4,922.4	6,448	5,654.1	5,319	3,868.5
V-Code - Supplementary	880	707.6	966	648.9	1,904	1,532.0	811	712.9	789	691.9	562	408.7
Group Total	18,410	14,803.2	21,434	14,397.7	30,372	24,437.7	24,603	21,626.2	24,608	21,578.3	18,983	13,806.3

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Excludes 432 patients with missing primary diagnosis.

#### **Primary Injury**

A primary external cause of injury code (E-code) was reported for 40,414 patients (27%). Overall, falls accounted for more than a quarter of all injuries (26%). Eleven percent of injured ED discharge patients were struck by an object or person, and 10% suffered motor vehicle occupant injuries. The "other" category includes burn/scald injuries, environmental injuries (heat, cold, bites, etc.), and injuries not otherwise listed. It is important to note that injured ED discharge patients represent the least severe injuries that are presented to the ED. More seriously injured persons are admitted to the hospital.

#### **Primary Mechanism of Injury**



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

The fifteen most common mechanisms of injury are listed below.

Primary Mechanism of Injury 15 Most Common E-Codes

Frequency	Percent
3,914	9.7
3,465	8.6
2,282	5.6
2,155	5.3
2,091	5.2
1,673	4.1
1,485	3.7
1,409	3.5
1,017	2.5
995	2.5
844	2.1
779	1.9
766	1.9
664	1.6
602	1.5
	3,914 3,465 2,282 2,155 2,091 1,673 1,485 1,409 1,017 995 844 779 766 664

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

The table below describes the primary mechanism of injury by age group. Overall, patients were discharged from the ED with a fall-related injury at a rate of 1,396 per 100,000 in the San Diego County population. The highest rates of fall injury occurred among children aged 0 to 14 years (1,917 per 100,000), and the elderly 65 years and older (3,544 per 100,000). Patients aged 15 to 24 years were discharged from the ED with motor vehicle occupant injuries at a rate of 1,005 per 100,000, compared to children (0 to 14 years) at a rate of 223 per 100,000.

#### Primary Injury by Age Group, Rates per 100,000

	0-	14	15-	-24	25	-44	45-	-64	65	5+	To	tal
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
MV Occupant	355	222.8	1,185	1,005.0	1,311	564.5	787	464.0	269	321.4	3,907	512.2
Motorcycle	13	8.2	95	80.6	124	53.4	72	42.4	6	7.2	310	40.6
Pedalcycle	208	130.5	160	135.7	189	81.4	105	61.9	24	28.7	686	89.9
Pedestrian	61	38.3	61	51.7	64	27.6	60	35.4	16	19.1	262	34.3
Other Vehicle	90	56.5	121	102.6	175	75.4	91	53.6	54	64.5	531	69.6
Falls	3,055	1,916.9	956	810.8	1,656	713.1	2,015	1,187.9	2,966	3,544.0	10,648	1,395.9
Self Inflicted	25	15.7	192	162.8	183	78.8	97	57.2	10	11.9	507	66.5
Assaults	124	77.8	774	656.5	794	341.9	315	185.7	33	39.4	2,040	267.4
Sport/Rec	1,139	714.7	949	804.9	484	208.4	138	81.4	15	17.9	2,725	357.2
Other	1,305	818.8	962	815.9	1,841	792.8	1,176	693.3	583	696.6	5,867	769.1
Unknown Intent	23	14.4	41	34.8	68	29.3	46	27.1	4	*	182	23.9
OD/Poisoning	270	169.4	248	210.3	461	198.5	377	222.3	348	415.8	1,704	223.4
Struck by	1,499	940.6	875	742.1	1,069	460.3	625	368.5	281	335.8	4,349	570.1
Cut/Pierce	437	274.2	738	625.9	1,178	507.3	683	402.6	195	233.0	3,231	423.6
Overexertion	550	345.1	749	635.3	1,255	540.4	678	399.7	233	278.4	3,465	454.2
Group Total	9,154	5,743.8	8,106	6,875.0	10,852	4,673.1	7,265	4,282.9	5,037	6,018.5	40,414	5,298.0

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

Black patients were discharged from the ED for injuries intentionally inflicted by another person (assaults) at a higher rate (663 per 100,000) than White patients (236 per 100,000) and Asian/other patients (127 per 100,000). White patients were discharged for injuries related to sports and recreational activities at higher rates (397 per 100,000) than Hispanic (297 per 100,000) or Asian/other patients (229 per 100,000). The rate of ED discharge for fall injuries was highest among Black (1,677 per 100,000) and White (1,578 per 100,000) patients.

Primary Injury by Race/Ethnicity, Rates per 100,000

	10/1	nite	Ric	ack	Hier	anic	Asian	(Othor	To	tal
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
MV Occupant	1,789	454.5	340	844.5	1,157	525.9	450	413.2	3,907	512.2
Motorcycle	227	57.7	11	27.3	49	22.3	14	12.9	310	40.6
Pedalcycle	435	110.5	32	79.5	159	72.3	41	37.6	686	89.9
Pedestrian	105	26.7	21	52.2	110	50.0	19	17.4	262	34.3
Other Vehicle	264	67.1	56	139.1	157	71.4	39	35.8	531	69.6
Falls	6,210	1,577.5	675	1,676.7	2,738	1,244.5	763	700.6	10,648	1,395.9
Self Inflicted	309	78.5	26	64.6	111	50.5	40	36.7	507	66.5
Assaults	930	236.2	267	663.2	616	280.0	138	126.7	2,040	267.4
Sport/Rec	1,564	397.3	151	375.1	654	297.3	249	228.7	2,725	357.2
Other	3,075	781.1	515	1,279.2	1,635	743.2	439	403.1	5,867	769.1
Unknown Intent	111	28.2	18	44.7	40	18.2	10	9.2	182	23.9
OD/Poisoning	951	241.6	136	337.8	421	191.4	156	143.3	1,704	223.4
Struck by Objects/Person	2,307	586.0	345	857.0	1,229	558.6	345	316.8	4,349	570.1
Cut/Pierce	1,778	451.7	166	412.3	920	418.2	255	234.2	3,231	423.6
Overexertion	1,921	488.0	304	755.1	862	391.8	277	254.4	3,465	454.2
Group Total	21,976	5,582.6	3,063	7,608.4	10,858	4,935.3	3,235	2970.6	40,414	5,298.0

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Total includes 1,656 patients with missing race/ethnicity.

Females were discharged from the ED for a fall injury at a rate of 1,513 per 100,000, for a motor vehicle occupant injury at a rate of 577 per 100,000, and for overexertion at a rate of 457 per 100,000. Males were discharged from the ED for a fall injury at a rate of 1,277 per 100,000, for injuries due to being unintentionally struck by an object or person at a rate of 700 per 100,000, and for unintentional cut/pierce injuries at a rate of 539 per 100,000. Male ED patients were discharged at higher rates for sports and recreational injuries at higher rates (523 per 100,000) than females (192 per 100,000).

Primary Injury by Gender, Rates per 100,000

	Male		Fen	nale	Total		
	Freq.	Rate	Freq.	Rate	Freq.	Rate	
MV Occupant	1,698	446.6	2,206	576.6	3,907	512.2	
Motorcycle	268	70.5	42	11.0	310	40.6	
Pedalcycle	530	139.4	156	40.8	686	89.9	
Pedestrian	147	38.7	115	30.1	262	34.3	
Other Vehicle	296	77.8	234	61.2	531	69.6	
Falls	4,856	1,277.1	5,790	1,513.3	10,648	1,395.9	
Self Inflicted	196	51.5	311	81.3	507	66.5	
Assaults	1,417	372.7	622	162.6	2,040	267.4	
Sport/Rec	1,989	523.1	736	192.4	2,725	357.2	
Other	3,295	866.6	2,570	671.7	5,867	769.1	
Unknown Intent	102	26.8	80	20.9	182	23.9	
OD/Poisoning	695	182.8	1,009	263.7	1,704	223.4	
Struck by Objects/Person	2,662	700.1	1,682	439.6	4,349	570.1	
Cut/Pierce	2,048	538.6	1,182	308.9	3,231	423.6	
Overexertion	1,717	451.6	1,747	456.6	3,465	454.2	
Group Total	21,916	5,764.0	18,482	4,830.7	40,414	5,298.0	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

ED patients living in the East Region were discharged with a reported mechanism of injury at higher rates (6,078 per 100,000) than any other region. Residents of the East Region were discharged from the ED for fall injuries at a high rate (1,607 per 100,000) when compared to the North Inland (1,124 per 100,000) or North Central (1,148 per 100,000) Regions. Residents of the Central Region were discharged from the ED for assaults at a higher rate (411 per 100,000) than the South Region (264 per 100,000).

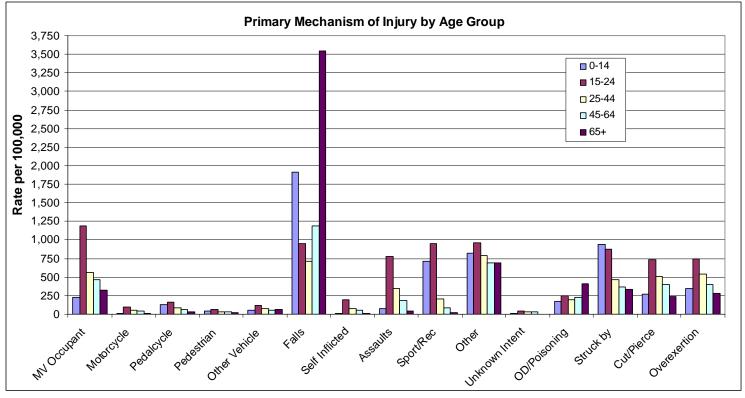
Primary Injury by Region, Rates per 100,000

	North Coastal		North Central		Central		South		East		North Inland	
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
MV Occupant	529	425.4	555	372.8	665	535.1	507	445.7	657	576.1	632	459.7
Motorcycle	52	41.8	46	30.9	28	22.5	39	34.3	58	50.9	56	40.7
Pedalcycle	99	79.6	133	89.3	115	92.5	90	79.1	95	83.3	110	80.0
Pedestrian	36	28.9	30	20.2	67	53.9	38	33.4	38	33.3	33	24.0
Other Vehicle	67	53.9	90	60.5	93	74.8	91	80.0	99	86.8	57	41.5
Falls	1,472	1,183.6	1,709	1,148.0	1,779	1,431.4	1,588	1,395.9	1,832	1,606.5	1,546	1,124.4
Self Inflicted	76	61.1	68	45.7	79	63.6	63	55.4	112	98.2	74	53.8
Assaults	242	194.6	265	178.0	511	411.2	300	263.7	319	279.7	226	164.4
Sport/Rec	422	339.3	550	369.4	317	255.1	378	332.3	437	383.2	415	301.8
Other	720	578.9	880	591.1	1,145	921.3	996	875.5	1,002	878.6	697	506.9
Unknown Intent	35	28.1	35	23.5	47	37.8	17	14.9	18	15.8	21	15.3
OD/Poisoning	246	197.8	286	192.1	272	218.9	280	246.1	310	271.8	216	157.1
Struck by Objects/Person	575	462.3	646	433.9	674	542.3	671	589.8	874	766.4	647	470.6
Cut/Pierce	473	380.3	562	377.5	603	485.2	435	382.4	518	454.2	464	337.5
Overexertion	551	443.0	534	358.7	636	511.7	507	445.7	562	492.8	416	302.6
Group Total	5,595	4,498.8	6,389	4,291.6	7,031	5,657.2	6,000	5,274.0	6,931	6,077.7	5,610	4,080.1

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges. \*Excludes 2,858 patients with missing or out of county zip codes.

#### **Elderly Falls**

As displayed below, the rate of discharge from the ED for falls among the elderly is significantly higher than for any other injury or age group (3,544 per 100,000).



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

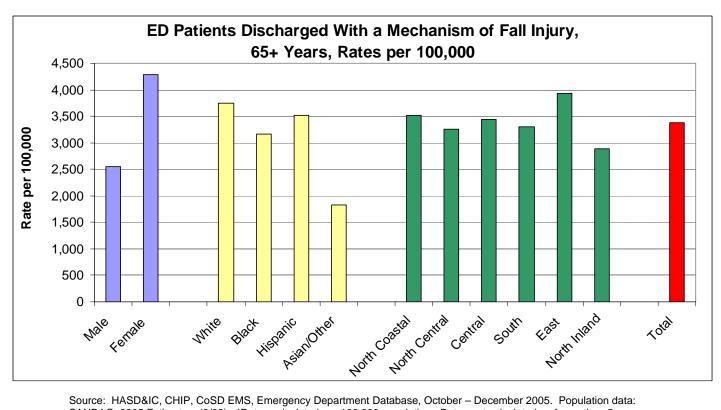
For the 2,966 elderly patients who were discharged from the ED during this quarter with a fall injury, the most common primary diagnoses are listed below. Note: the most serious fall injuries would have been admitted to the hospital, and are not reflected here.

15 Most Common Primary Diagnoses of ED Patients
Discharged With a Fall Injury, 65+ Years

Primary Diagnosis	Frequency	Percent
OTH OPEN WOUND HEAD*	476	16.0
OTH/UNSP INJURY*	258	8.7
CONTUSION FACE/SCALP/NCK	184	6.2
CONTUSION LOWER LIMB*	172	5.8
FRACTURE RADIUS AND ULNA*	168	5.7
FRACTURE HUMERUS*	127	4.3
CONTUSION TRUNK*	125	4.2
GENERAL SYMPTOMS*	103	3.5
CONTUSION UPPER LIMB*	84	2.8
OPEN WOUND ELBOW/FOREARM*	71	2.4
FX RIB(S)/STERNUM/LARYNX/TR*	63	2.1
SPRAINS OTH/UNSPEC BACK*	62	2.1
FRACTURE NECK FEMUR*	53	1.8
SUPERFICIAL INJURY FACE/NECK*	51	1.7
OTH/UNS DISORDER BACK*	50	1.7

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005.

Female patients over the age of 65 years had a higher rate of discharge from the ED (4,289 per 100,000) for fall injuries than male patients (2,551 per 100,000). White patients (3,752 per 100,000) and Hispanic patients (3,512 per 100,000) had the highest rates of discharge for fall injury, compared to Black patients (3,164 per 100,000) and Asian/other patients (1,832 per 100,000). The rate of ED discharge for elderly fall injury in the East Region was slightly higher than in the other Regions.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

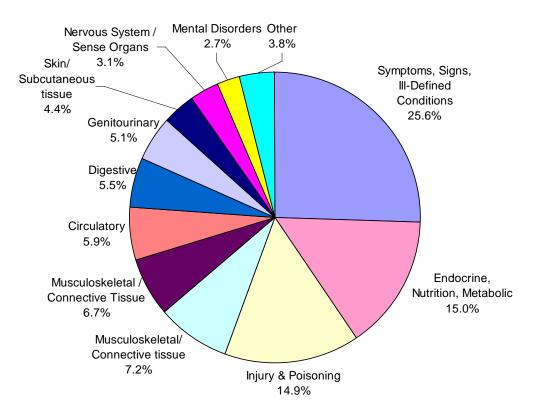
#### **Diabetes Mellitus**

A patient who is discharged with a primary diagnosis of diabetes is one who has a condition directly related to the disease, such as diabetic hypoglycemia or hypoglycemic shock. A patient discharged with a secondary diagnosis of diabetes may or may not be presenting with symptoms directly related to their disease, but they have been identified as diabetic due to the complications that may arise as the result of the disease. Although there is a high rate of hospital admission among diabetic patients who present to the ED, most diabetic patients who are discharged from the emergency department do not have a primary diagnosis of diabetes. For this report, a diabetic patient is one who has either a primary or secondary diagnosis of diabetes.

Of the 148,526 ED discharge patients, 7,845 were identified as diabetic (5.3%). Overall, 55% were female, and 61 patients were under the age of 15 years. Ninety-one percent were identified as having type II diabetes, not specified as uncontrolled and 7% were identified as having type I diabetes, not specified as uncontrolled. Of all patients who were identified as diabetic, 1,044 had a primary diagnosis of diabetes (13%). Forty-three percent of patients with a primary diagnosis of diabetes were diagnosed with diabetic hypoglycemia or hypoglycemic shock. Another 45% were diagnosed with uncomplicated diabetes, with no mention of the presenting symptoms.

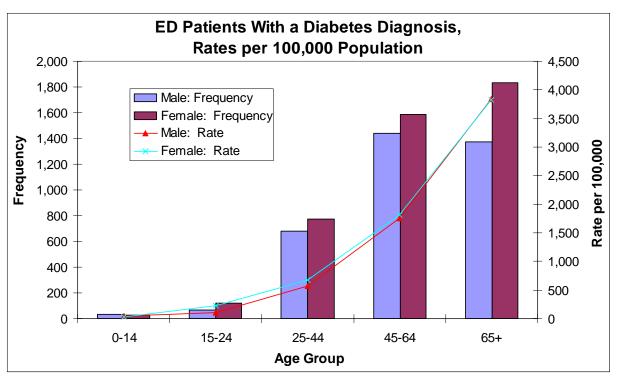
The primary diagnoses for all identified diabetic ED discharge patients (7,845) are presented below. Twenty-six percent of patients were diagnosed with symptoms, signs, and ill-defined conditions, most of which were for respiratory, abdominal, or general symptoms. While 15% of diabetic ED discharge patients had a primary diagnosis of injury or poisoning, 18% were assigned an E-code for an injury or poisoning. Of patients with an E-code, 39% suffered a fall, and 17% were reported to have had an adverse reaction to drugs, medicinal, or biological substances.

#### **Primary Diagnosis of Diabetic ED Discharge Patients**



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

The annual rate of diabetic ED discharge patients increased with increasing age. The rate for female patients (224 per 100,000) was more than double the rate for male patients (102 per 100,000) in the 15 to 24 year age group, but was nearly the same in the older age groups. Overall, 1,028 patients were discharged from the ED with a diagnosis of diabetes for every 100,000 people in the population.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

ED Patients With a Diabetes Diagnosis, Rates per 100,000 Population

	Ma	ale	Fen	nale	Total		
	Freq.	Freq. Rate		Freq. Rate		Rate	
0-14	32	40.1	29	36.5	61	38.3	
15-24	65	101.6	121	224.4	186	157.8	
25-44	679	574.7	772	676.8	1,452	625.3	
45-64	1,441	1,749.1	1,589	1,821.3	3,030	1,786.3	
65+	1,375	3,833.1	1,831	3,828.9	3,206	3,830.7	
Total	3,540	931.0	4,305	1,125.2	7,845	1,028.4	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

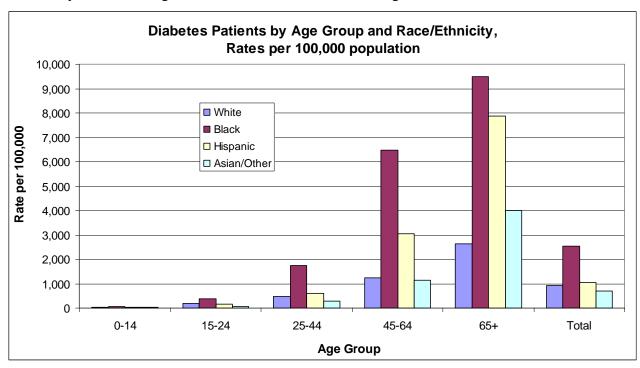
Out of all ED discharge patients, the percentage who were identified as diabetic increased with increasing age group. Fifteen percent of male ED discharge patients aged 65 years and older were diagnosed with diabetes, compared to 14% of female patients.

Percent of All ED Patients With Diabetes Diagnoses

	Male	Female	Total	
0-14	0.2	0.2	0.2	
15-24	0.8	1.0	0.9	
25-44	3.4	2.9	3.1	
45-64	10.0	10.0	10.0	
65+	15.4	14.2	14.7	
Total	5.1	5.4	5.3	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

Overall, Black ED patients were discharged with a diabetes diagnosis at a higher rate than any other racial/ethnic group (2,529 per 100,000). This was true across all age groups; nearly one out of every ten Black persons aged 65 years and older in San Diego County were discharged from the ED with a diabetes diagnosis.



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

ED Patients With a Diabetes Diagnosis, Rates per 100,000

	White		Black		Hisp	anic	Asian/Other	
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate
0-14	30	46.7	7	73.6	17	27.8	5	20.5
15-24	98	197.1	29	395.9	71	164.6	11	62.0
25-44	515	469.5	226	1,742.2	462	618.5	105	301.2
45-64	1,351	1,239.7	507	6,474.7	928	3,056.2	257	1,144.5
65+	1,614	2,647.0	249	9,491.1	835	7,882.0	379	3,990.0
Total	3,608	916.5	1,018	2,528.7	2,313	1,051.3	757	695.1

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

The percentage of patients within each racial/ethnic category who were discharged with a diabetes diagnosis increased with increasing age group. Twenty-five percent of Hispanic patients, 24% of Black patients, and 21% of Asian/Other patients aged 65 years and older were diagnosed with diabetes, compared to just 11% of white patients.

**Percent of All ED Patients With Diabetes Diagnoses** 

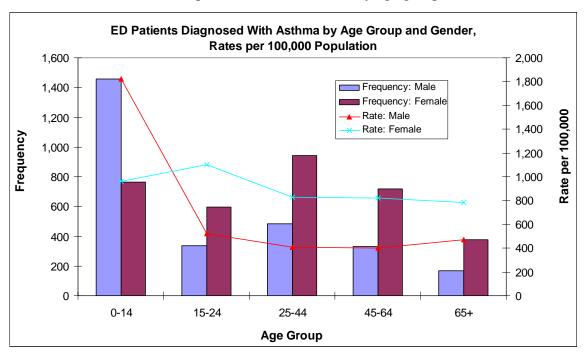
	White	Black	Hispanic	Asian/Other	Unknown	Total
0-14	0.33	0.29	0.12	0.14	0.25	0.20
15-24	0.91	1.18	0.95	0.61	0.57	0.92
25-44	2.45	4.77	3.85	3.14	1.96	3.14
45-64	7.30	14.47	15.59	11.23	8.48	10.01
65+	11.00	24.06	24.73	20.97	12.61	14.70
Total	4.86	7.19	5.35	5.95	3.54	5.28

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005.

#### **Asthma**

As with diabetes, asthmatic ED patients are those with either a primary or secondary diagnosis of asthma. A total of 6,169 ED patients (4.2%) were identified as asthmatic during this quarter. There were 2,219 children aged 0 to 14 years with an asthma diagnosis, two-thirds of whom were male. Among patients 15 years and older (N = 3,950), ED discharge patients with asthma were more often female (67%).

The rate of ED discharge for patients with asthma was higher overall for females (887 per 100,000) than for males (729 per 100,000), and varied by age group.



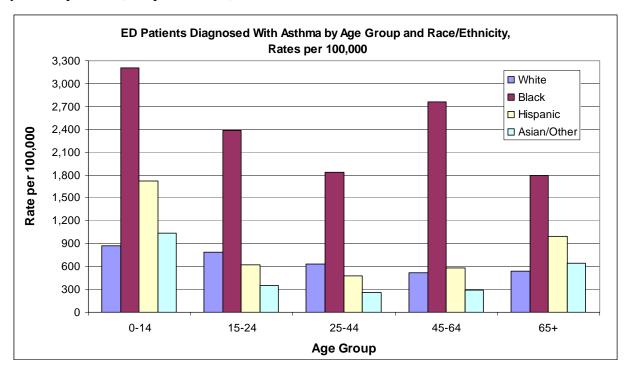
Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

ED Patients Diagnosed With Asthma Rates per 100,000 Population

	Ma	ale	Fen	nale	Total		
	Freq.	Rate	Freq.	Rate	Freq.	Rate	
0-14	1,455	1,822.4	764	960.7	2,219	1,392.4	
15-24	336	525.2	594	1,101.4	931	789.6	
25-44	482	408.0	944	827.5	1,427	614.5	
45-64	329	399.4	718	823.0	1,047	617.2	
65+	170	473.9	375	784.2	545	651.2	
Total	2,772	729.0	3,395	887.4	6,169	808.7	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

Across all age groups, the rate of ED discharge with an asthma diagnosis among Blacks in San Diego County was significantly higher than any other racial/ethnic group. This was especially apparent among children aged 0 to 14 years (3,208 per 100,000) and in the 45 to 64 year age group (2,758 per 100,000). The rate of ED discharge with an asthma diagnosis for Whites decreased with increasing age, with a slight increase among 65+ year old patients (536 per 100,000).



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

ED Patients Diagnosed With Asthma Rates per 100,000 Population

rates per respect reparation									
	Wh	nite	Bla	ack	Hisp	anic	Asian/Other		
	Freq.	Rate	Freq.	Rate	Freq.	Rate	Freq.	Rate	
0-14	562	874.1	305	3,207.9	1,056	1,725.1	252	1034.6	
15-24	394	792.5	175	2,389.2	267	619.0	62	349.7	
25-44	696	634.5	238	1,834.8	359	480.6	89	255.3	
45-64	565	518.5	216	2,758.4	177	582.9	66	293.9	
65+	327	536.3	47	1,791.5	105	991.2	61	642.2	
Total	2,544	646.3	981	2,436.8	1,964	892.7	530	486.7	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Rates not calculated on fewer than 5 cases. Totals do not include <3% of all civilian ED discharges.

Across all age groups, a higher percentage of Black ED discharge patients were diagnosed with asthma than any other racial/ethnic group. More than 12% of Black patients aged 0 to 14 years who were discharged from the ED had an asthma diagnosis, compared to 7% of 0 to 14 year old children overall. The percentage of ED patients with an asthma diagnosis decreased with increasing age group.

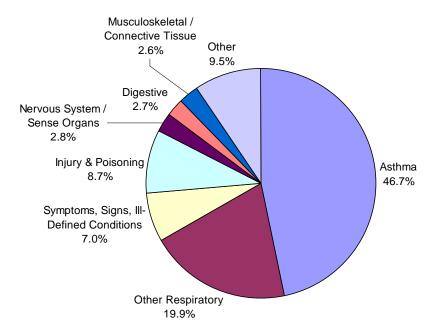
Percent of All ED Patients with Asthma

	White	Black	Hispanic	Asian/Other	Unknown	Total
0-14	6.13	12.47	7.32	7.22	5.42	7.31
15-24	3.65	7.15	3.57	3.44	3.78	3.98
25-44	3.31	5.03	2.99	2.66	3.40	3.36
45-64	3.05	6.16	2.97	2.88	2.67	3.36
65+	2.23	4.54	3.11	3.38	1.47	2.57
Total	3.43	6.92	4.54	4.16	3.56	4.15

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

Of all patients identified as having asthma, 47% were discharged from the ED with a primary diagnosis of asthma (N = 2,883). Twenty percent were diagnosed with other respiratory conditions, and 7% with symptoms, signs, and ill-defined conditions (not including respiratory).

**Primary Diagnosis of Asthmatic ED Discharge Patients** 



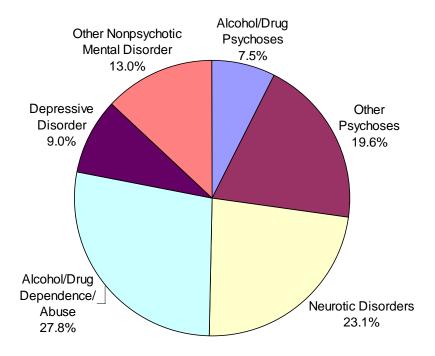
Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

#### **Mental Disorders**

Mental disorder diagnoses include both mental illnesses, such as psychoses, neurotic disorders, and depressive disorders, and substance use and abuse. A total of 17,534 patients discharged from a San Diego County emergency department during this quarter were diagnosed with a mental disorder (12%), 5,023 of whom had a primary diagnosis of mental disorder.

As shown in the graph below, 28% of all patients with a primary diagnosis of mental disorder were diagnosed with alcohol or drug dependence or abuse, and 8% were diagnosed with alcohol or drug related psychoses. Twenty-three percent were diagnosed with a neurotic disorder, and 9% with a depressive disorder.

## ED Patients With a Primary Diagnosis of Mental Disorder (N=5,023)



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October - December 2005.

Of the 17,534 patients with any mental disorder diagnosis, 7,744 were diagnosed with one or more mental illness without substance use or abuse (44%), 8,127 were diagnosed with one or more substance use or abuse diagnosis without mental illness (46%), and 1,663 were diagnosed with both a mental illness and substance use or abuse (9%).

### **Emergent and Non-Emergent Care at San Diego County Emergency Departments**

Until now, the ability to effectively monitor ED utilization in San Diego County has been limited by a lack of data. Overall trends in ED volume have been tracked, but analysts have been unable to gain insight into the characteristics of ED use. Due to the cooperation between area hospitals, the Hospital Association of San Diego and Imperial Counties, the Community Health Improvement Partners, and County of San Diego, Emergency Medical Services, San Diego County has a near complete data set representing the utilization of emergency departments in the county, allowing for population-based analyses of ED discharge data.

One important component that is missing from the ED data set is a measure of the urgency of the visit. In 1999, under the direction of John Billings and his colleagues at New York University, the Emergency Department Use Profiling Algorithm was developed to analyze ED visits according to emergent versus non-emergent status. The algorithm uses a patient's primary diagnosis at the time of discharge from the ED to assign visits to one of five distinct categories.

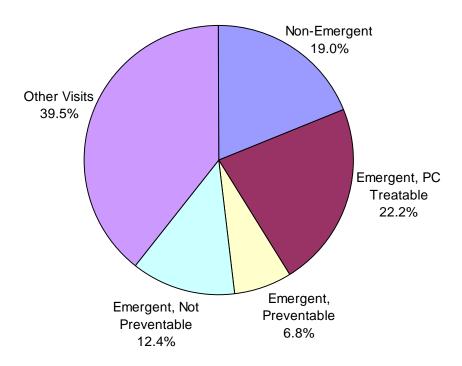
- 1. Non-emergent, primary care treatable (Non-Emergent)
- 2. Emergent, primary care treatable (Emergent, PC Treatable)
- 3. Emergent, preventable/avoidable (Emergent, Preventable)
- 4. Emergent, non-preventable/non-avoidable (Emergent, Not Preventable)
- 5. Other visits not classified according to emergent or non-emergent status (Other Visits)

ED visits are first classified as either emergent or non-emergent. Emergent visits are those that require contact with the medical system within 12 hours, and are further classified as needing ED care or treatable in a primary care setting. Visits are classified as primary care treatable if care could have been safely provided in a setting other than an ED. If ED care is needed, visits are classified as either non-preventable/non-avoidable or preventable/avoidable. Preventable/avoidable conditions are those that could have been treated in settings other than the ED if earlier care had been sought. A significant percentage of visits remain unclassified by the algorithm in terms of their emergent status. Visits with a primary diagnosis of injury, mental health, substance abuse, and other smaller incidence categories are not assigned to classifications of interest.

The ED Use Profiling was applied to the San Diego County ED discharge data, and analyzed to further evaluate the characteristics of ED use. The data resulting from the use of this algorithm should be interpreted with caution. It is not intended as a triage tool or as a mechanism to determine whether ED use in a specific case is appropriate, but rather as a means of examining ED utilization to gain insight into ways to improve access to primary care for specific subgroups of the population. Since very few diagnostic categories are clear-cut for all cases, the algorithm assigns cases probabilistically on a percentage basis, reflecting potential uncertainty and variation.

A significant percentage of ED discharges in San Diego County could have been treated in settings other than the ED. As the figure below shows, 41% of ED visits (Non-emergent and Emergent, PC treatable) could have been treated in a primary care setting. In other words, four out of ten visits that did not result in an inpatient admission could have been safely treated outside of the ED.

## **Visits by Emergent and Non-Emergent Categories**



Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. \*ED Use profiling algorithm developed by John Billings, NYU, and applied to San Diego County ED data.

The table below describes ED discharges by emergent and non-emergent categories. Row percentages refer to the percentage within each subgroup, for example, the percentage of 15-24 year olds that had non-emergent visits. Rates are calculated per 100,000 in the population. The highest rate of non-emergent ED visits for a medical primary diagnosis occurred among patients aged 65 years and older (4,168 per 100,000), Black patients (10,094 per 100,000), female patients (5,504 per 100,000), and among patient living in the Central Region (6,445 per 100,000).

ED Discharges by Emergent and Non-Emergent Categories, Rates per 100,000

	Non-Emergent Emergen		rgent, PC Treatable Emergent, Pre		ent, Prev	entable	ntable Emergent, Not Preventable		Other Visits						
	Freq.	row %	Rate	Freq.	row %	Rate	Freq.	row %	Rate	Freq.	row %	Rate	Freq.	row %	Rate
Totals															
All Ages	28,259	19.0	4,682.9	32,998	22.2	5,468.2	10,135	6.8	1,679.4	18,477	12.4	3,061.9	58,664	39.5	9,721.4
Age Groups															
0-14	5,297	17.4	3,323.4	7,619	25.1	4,780.4	2,880	9.5	1,807.4	2,498	8.2	1,567.4	12,062	39.7	7,568.7
15-24	4,430	19.0	3,757.2	4,664	20.0	3,955.4	1,279	5.5	1,084.5	2,340	10.0	1,984.7	10,665	45.6	9,045.0
25-44	8,880	20.9	3,823.8	9,474	22.3	4,079.7	2,419	5.7	1,041.9	5,340	12.6	2,299.4	16,333	38.5	7,033.4
45-64	6,165	19.8	3,634.3	6,822	21.9	4,021.4	1,964	6.3	1,157.6	4,631	14.9	2,729.9	11,542	37.1	6,804.5
65+	3,488	16.4	4,167.8	4,420	20.8	5,281.4	1,592	7.5	1,902.5	3,669	17.3	4,383.4	8,061	38.0	9,631.8
Race/Ethnicity															
White	13,360	18.0	4,056.3	15,118	20.4	4,590.1	4,562	6.2	1,385.1	9,651	13.0	2,930.2	31,489	42.5	9,560.7
Black	3,104	21.9	10,094.1	3,441	24.3	11,190.6	1,271	9.0	4,132.6	1,607	11.3	5,224.4	4,745	33.5	15,429.1
Hispanic	8,505	19.7	5,356.2	10,486	24.3	6,603.3	3,195	7.4	2,012.3	5,033	11.6	3,169.6	16,020	37.1	10,088.8
Asian/Other	2,500	19.6	2,956.6	3,052	24.0	3,609.9	895	7.0	1,058.3	1,644	12.9	1,945.0	4,636	36.4	5,484.1
Gender															
Male	11,570	16.7	3,851.7	14,398	20.7	4,793.2	4,885	7.0	1,626.3	8,019	11.5	2,669.6	30,616	44.1	10,192.5
Female	16,684	21.1	5,504.9	18,595	23.5	6,135.7	5,245	6.6	1,730.7	10,459	13.2	3,451.0	28,019	35.5	9,245.2
Region															
North Coastal	3,069	16.6	3,157.5	3,800	20.6	3,910.2	1,121	6.1	1,153.9	2,415	13.1	2,484.5	8,070	43.7	8,303.3
North Central	4,012	18.7	3,255.5	4,442	20.7	3,603.7	1,296	6.0	1,051.5	2,744	12.8	2,226.6	8,963	41.8	7,271.8
Central	6,263	20.6	6,444.9	7,245	23.8	7,455.4	2,326	7.7	2,393.4	3,484	11.5	3,585.3	11,085	36.5	11,406.8
South	5,113	20.8	5,794.2	5,939	24.1	6,729.7	1,942	7.9	2,200.4	2,994	12.2	3,392.8	8,655	35.1	9,806.9
East	4,612	18.7	5,122.9	5,602	22.8	6,222.4	1,679	6.8	1,865.4	3,231	13.1	3,588.5	9,498	38.6	10,549.4
North Inland	3,326	17.3	3,092.7	3,946	20.6	3,669.1	1,167	6.1	1,085.0	2,489	13.0	2,314.6	8,265	43.1	7,684.5

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Population data: SANDAG, 2005 Estimates, (3/06). \*Rates calculated per 100,000 population. Totals do not include <3% of all civilian ED discharges. \*ED Use profiling algorithm developed by John Billings, NYU, and applied to San Diego County ED data.

The following table presents relative rates by comparing the proportion of discharges within each category to the emergent, not preventable category. Overall, for every two visits that were in the emergent, not preventable category, there were three non-emergent visits and more than three emergent but primary care treatable visits. Black patients used the ED for non-emergent conditions compared to emergent, not preventable conditions at higher rates (1.93) than White patients (1.38), and females (1.60) used the ED for non-emergent conditions at higher rates than males (1.44) when compared to emergent, not preventable conditions.

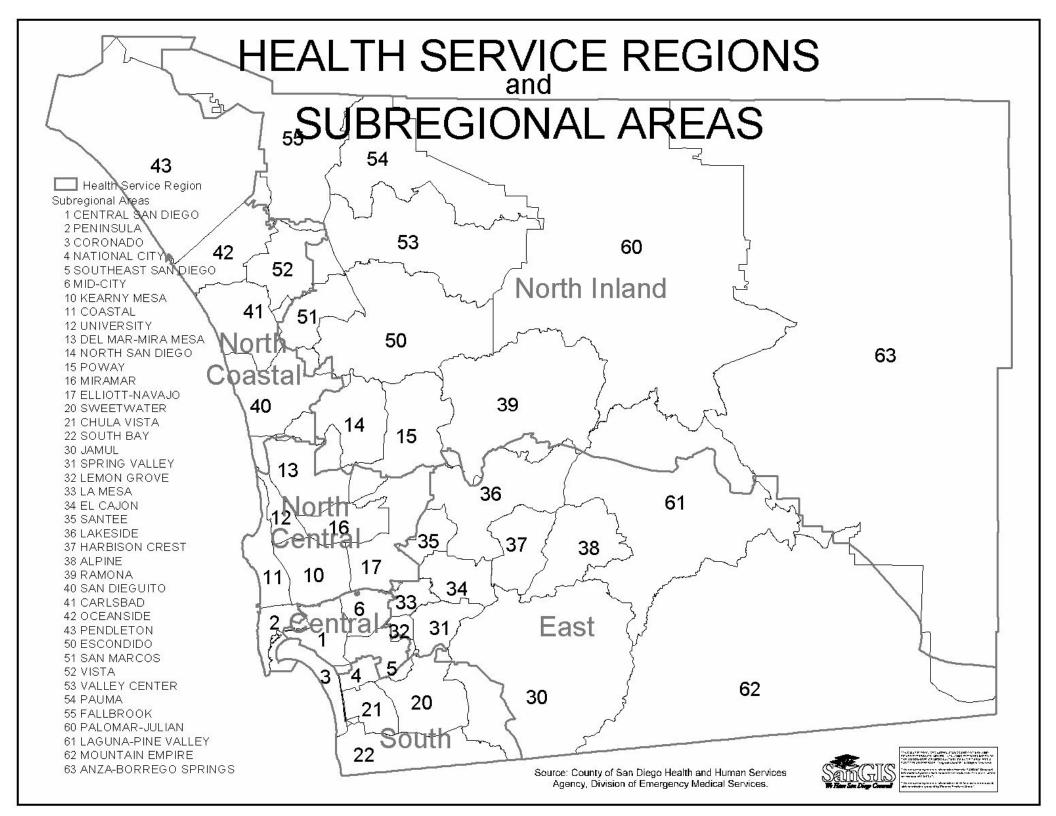
Relative Rates for ED Discharges by Non-Emergent and Emergent Categories, San Diego County Participating Hospitals

Categories	s, san Diego (	Journey Further	ipating nosp	l	
	Non-Emergent	Emergent, PC Treatable	Emergent, Preventable	Emergent, Not Preventable	
T	1.50	4.70	0.55	1.00	
Total	1.53	1.79	0.55	1.00	
Age					
0-14	2.12	3.05	1.15	1.00	
15-24	1.89	1.99	0.55		
25-44	1.66	1.77	0.45		
45-64	1.33	1.47	0.42		
65+	0.95	1.20	0.43		
Race					
White	1.38	1.57	0.47	1.00	
Black	1.93	2.14	0.79		
Hispanic	1.69	2.08	0.63		
Asian/Other	1.52	1.86	0.54	1.00	
Unknown	1.45	1.68	0.39		
Gender					
Male	1.44	1.80	0.61	1.00	
Female	1.60	1.78	0.50		
Unknown	1.09	1.08	0.57	1.00	
Insurance Status					
Self-Pay	1.86	1.99	0.59	1.00	
Non-Federal Programs	2.07	2.42	0.98	1.00	
Medi-Cal	2.07	2.56	0.86	1.00	
Medicare HMO	0.85	1.12	0.40	1.00	
Medicare Traditional	1.21	1.42	0.50	1.00	
Private HMO	1.30	1.60	0.43	1.00	
Private Other	1.42	1.61	0.44		
Workers Compensation	7.80	4.49	0.22		
Other Federal Programs	1.70	1.89	0.53		
Other	2.06	2.47	0.63	1.00	
Region					
North Coastal	1.27	1.57	0.46		
North Central	1.46	1.62	0.47		
Central	1.80	2.08	0.67	1.00	
South	1.71	1.98	0.65	1.00	
East	1.43	1.73	0.52		
North Inland	1.34	1.59	0.47		
Out of County	1.64	1.80	0.54		
Unknown	1.74	1.85	0.55	1.00	

Source: HASD&IC, CHIP, CoSD EMS, Emergency Department Database, October – December 2005. Excludes <3% of all civilian ED discharges. \*ED Use profiling algorithm developed by John Billings, NYU, and applied to San Diego County ED data. Relative rates use the emergent, not preventable category as the reference.

## Appendix A

Health Service Region and Subregional Area Map



# Appendix B

Expected Source of Payment

#### EXPECTED SOURCE OF PAYMENT

As defined by the Office of Statewide Health Planning and Development (OSHPD), the patient's expected source of payment, defined as the type of entity or organization which is expected to pay or did pay the greatest share of the patient's bill, is reported using the following categories:

**Medicare part A:** Defined by Title XVIII of the Social Security Act. Covers inpatient hospital stays, care in a skilled nursing facility, hospice care, and some health care.

**Medicare part B:** Defined by Title XVIII of the Social Security Act. Covers some outpatient hospital care and some home health services.

**Health Maintenance Organization (HMO) Medicare Risk:** This category includes Medicare patients covered under an HMO arrangement only.

**Medicaid** (**Medi-Cal**): Medicaid is called Medi-Cal in California. Defined by Title XIX of the Social Security Act and Title I of the Federal Medicare Act. Report all Medi-Cal including Fee for Service, PPO, POS, EPO, and HMO.

**Health Maintenance Organization (HMO):** This category includes Blue Cross/Blue Shield or commercial insurance companies HMOs. Both California HMOs (Knox-Keene) and out-of-state HMOs are included.

This category *does not* include Medicare or Medi-Cal under a HMO arrangement. Medicare payments covered under an HMO arrangement are reported as HMO Medicare Risk, and Medi-Cal payments covered under an HMO arrangement are reported as Medicaid (Medi-Cal).

**Preferred Provider Organization (PPO):** This category includes Blue Cross/Blue Shield or commercial insurance companies under a PPO arrangement.

This category *does not* include Blue Cross/Blue Shield or commercial insurance companies on a Fee for Service Basis. This category *does not* include Medi-Cal patients covered under a PPO arrangement.

**Exclusive Provider Organization (EPO):** This category includes Blue Cross/Blue Shield or commercial insurance companies under an EPO arrangement.

This category *does not* include Blue Cross/Blue Shield or commercial insurance companies on a Fee for Service basis. This category *does not* include Medi-Cal patients covered under an EPO arrangement.

**Point of Service (POS):** This category includes Blue Cross/Blue Shield or commercial insurance companies under a POS arrangement.

This category *does not* include Blue Cross/Blue Shield or commercial insurance companies on a Fee for Service basis. This category *does not* include Medi-Cal patients covered under a POS arrangement.

**Blue Cross/Blue Shield:** Includes only Fee for Service payments. PPO, POS, EPO, and HMO are reported under the appropriate stated categories.

**CHAMPUS** (**TRICARE**): Includes any PPO, POS, EPO, HMO, Fee for Service, or other payment from the Civilian Health and Medical Program of the Uniformed Services or from TRICARE.

**Title V:** Defined by the Federal Medicare Act for Maternal and Child Health. Title V of the Social Security Act is administered by the Health Resources and Services Administration, Public Health Service, Department of Health and Human Services. Includes Maternal and Child Health program payments that are not covered under Medicaid (Medi-Cal). California Children Services (CCS) payments are reported here.

**Veterans Affairs Plan:** Includes any PPO, POS, EPO, HMO, Fee for Service, or other payment resulting from Veterans Administration coverage.

**Other federal program:** Includes payment by federal programs not covered by any other category.

Other non-federal program: Includes any form of payment from local, county, or state government agencies. Includes payment from county funds, whether from county general funds or from other funds used to support county health programs including County Indigent Programs including County Medical Services Program (CMSP), California Health Care for Indigent Program (CHIP), County Children's Health Initiative Program (C-CHIP), and Short-Doyle funds. Also include the State Children's Health Insurance Program (SCHIP), Managed Risk Medical Insurance Board (MRMIB), Health Families Program (HFP), and Access for Infants and Mothers (AIM).

This category *does not* include Title V for California Children Services (CCS) payments.

**Workers compensation health claim:** Payment from Workers' Compensation Health claim insurance is reported under this category.

**Self-Pay:** Payment directly by the patient, guarantor, relatives, or friends. The greatest share of the patient's bill is not expected to be paid by any form of insurance or other third party.

**Automobile medical:** Include PPO, POS, EPO, HMO, and Fee for Service or any other payment resulting from automobile coverage.

**Other:** Includes payments by governments of other countries. Includes payment by local or organized charities, such as the Cerebral Palsy Foundation, Easter Seals, March of Dimes, Shriners, etc. Includes payments not listed in other categories.

## **Aggregation of Payment Categories**

For the purpose of this report, expected source of payment has been aggregated into categories as displayed below.

Payment Category	Expected Source of Payment
Medicare - Traditional	Medicare part A, part B
Medicare - HMO	HMO Medicare Risk
Medicaid (Medi-Cal)	Medicaid (Medi-Cal)
Private - HMO	НМО
Private - Other	PPO, EPO, POS, Blue Cross/Blue Shield
Other Federal Programs	CHAMPUS (TRICARE), Title V, Veterans Affairs Plan, Other federal program
Other Non-Federal Programs	Other non-federal program
Workers Compensation	Workers compensation health claim
Self-Pay	Self-pay
Other	Automobile medical, other

## **Appendix C**

Primary Diagnosis Categories

#### PRIMARY DIAGNOSIS CATEGORIES

**Circulatory** – Includes rheumatic fever, rheumatic heart disease, hypertensive disease, ischemic heart disease, diseases of pulmonary circulation, other forms of heart disease, cerebrovascular disease, and diseases of veins and lymphatics.

**Endocrine, Nutrition & Metabolic Diseases** – Includes disorders of the thyroid and other endocrine glands, nutritional deficiencies, diabetes mellitus, and metabolic and immunity disorders.

**Mental Disorders** – Includes psychoses, neurotic disorders, personality disorders, and other nonpsychotic mental disorders.

**Skin/Subcutaneous Tissue** – Includes infections of skin and subcutaneous tissue, and inflammatory conditions of skin and subcutaneous tissue.

**V-Code Supplementary** – Circumstances other than a disease or injury, such as a person who is not currently sick donating an organ or blood, a person with a known disease encountering the system for specific treatment (dialysis, chemotherapy, cast change), or when a problem is present which influences the person's health status but is not in itself a current illness or injury.

**Digestive** – Includes diseases of the oral cavity, salivary glands and jaws, diseases of the esophagus, stomach and duodenum, appendicitis, hernia of the abdominal cavity, noninfectious enteritis and colitis, and other diseases of the intestines, peritoneum and digestive system.

**Nervous System, Sense Organs** – Includes inflammatory diseases of the central nervous system (CNS), hereditary and degenerative diseases of the CNS, disorders of the peripheral nervous system, and disorders of the eye and ear.

**Genitourinary** – Includes nephritis, nephritic syndrome, and nephrosis, other diseases of the urinary system, diseases of male genital organs and female pelvic organs, disorders of the breast, and disorders of the female genital tract.

**Musculoskeletal/Connective Tissue** – Includes arthropathies (arthritis) and related disorders, dorsopathies (back), rheumatism (excluding the back), osteopathies, chondropathies, and acquired musculoskeletal deformities.

**Respiratory** – Includes acute respiratory infections, diseases of the upper respiratory tract, pneumonia and influenza, COPD, lung disease due to external agents, and other diseases of the respiratory system.

**Symptoms, signs, ill-defined conditions** – Includes symptoms, signs, abnormal results of laboratory or other investigative procedures, and ill-defined conditions with no diagnosis classifiable elsewhere.

**Injury and Poisoning** – Includes fractures, dislocation, sprains and strains, intracranial injury, internal injury, open wounds, hematoma, lacerations, late effects of injury and poisoning, superficial injury, contusions, crushing injury, foreign bodies, traumatic complications of injury, poisoning, and complications of surgical or medical care.

Complications of Pregnancy, Childbirth and the Puerperium – Includes complications related to pregnancy, labor and delivery, and complications of the period after childbirth.

Infectious and Parasitic Diseases – Includes diseases generally recognized as communicable or transmissible as well as a few diseases of unknown but possibly infectious origin. Includes intestinal infectious diseases, zoonotic and other bacterial diseases, HIV, polio and other viral diseases of the central nervous system, other viral diseases, including arthropod-borne diseases, chlamydiae and hepatitis, rickettsioses, syphilis and other venereal diseases, other spirochetal diseases, mycoses, helminthiases, and other infectious and parasitic diseases.

**Neoplasms** – Includes primary and secondary malignant neoplasms, benign neoplasms, carcinoma in situ, and neoplasm of uncertain behavior or unspecified nature.

**Blood and Blood Forming Organs** – Includes anemias (not as a complication of pregnancy), coagulation defects, diseases of white blood cells, and other diseases of the blood and blood-forming organs.

**Congenital Anomalies** – Includes congenital anomalies affecting all body regions.

Conditions in the Perinatal Period – Includes conditions that have their origin in the perinatal period even though death or morbidity occurs later.

# Appendix D

Common Diagnoses

#### **COMMON DIAGNOSES**

**Abdominal Symptoms** - Includes abdominal tenderness or pain, which is otherwise unclassifiable.

**Acute Respiratory Infections** - Includes the common cold, sore throat, tonsillitis, laryngitis, and acute bronchitis.

**Arthropathies and Related Disorders** - Refers to arthritis related problems.

**COPD and Allied Health Conditions** – Includes asthma, chronic bronchitis, emphysema and other chronic obstructive lung diseases.

**Diseases of the Ear and Mastoid Process -** Includes otitis media, otitis externa, mastoiditis, and hearing loss.

**Dorsopathies** - Refers to disorders of the back and cervical region.

**General Symptoms** - Includes altered consciousness, hallucinations, syncope, convulsions, dizziness, sleep disturbances, fever, and general malaise and fatigue.

**Head and Neck Symptoms** - Diagnosed for general headache, neck pain, swelling, or voice and speech disturbances.

**Ill-defined and unknown causes of morbidity and mortality** - Includes senility, sudden death, asphyxia, respiratory arrest, nervousness, debility, cachexia, and other ill-defined conditions.

**Infections of Skin and Subcutaneous Tissue** - Includes boils, cellulitis and abscesses, cysts, and other local infections of the skin.

Other Diseases of the Urinary System - Includes kidney stones, kidney infections, urinary tract infections and cystitis.

**Respiratory Symptoms** – Includes undiagnosed respiratory abnormalities, including hyperventilation, apnea, shortness of breath, wheezing, cough, painful respiration and other discomfort in the chest.

**V-code diagnosis for a health services encounter -** Includes those with a lack of, or inadequate housing, family disturbances and other psychosocial circumstances, stress, unavailability of other medical facilities for care, and other persons seeking consultation, follow-up examinations or administrative assistance.

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